Mesker Bros. Iron Co.

St. Louis, Mo.
U. S. A.

Autograph Album

Introductory Notes

Since the manufacture of the following named Mesker Fire Retardants,

FIRE-PROOF SOLID SECTION STEEL SASH.

FIRE-PROOF HOLLOW METAL WINDOWS.

FIRE-PROOF COMBINATION STEEL AND CONCRETE INTERIOR STAIRS.

FIRE-PROOF STEEL STAIRS.

FIRE-PROOF DOORS AND SHUTTERS.

METAL COVERED, WOOD CORE, DOORS.

PLATE STEEL DOOR FRAMES OR JAMBS.

PLATE STEEL SECTIONAL DOORS AND SHUTTERS.

STEEL AND GLASS STAIR AND ELEVATOR INCLOSURES.

PLATE STEEL COLUMN GUARDS FOR CONCRETE PIERS.

PLATE STEEL SASH DOORS.

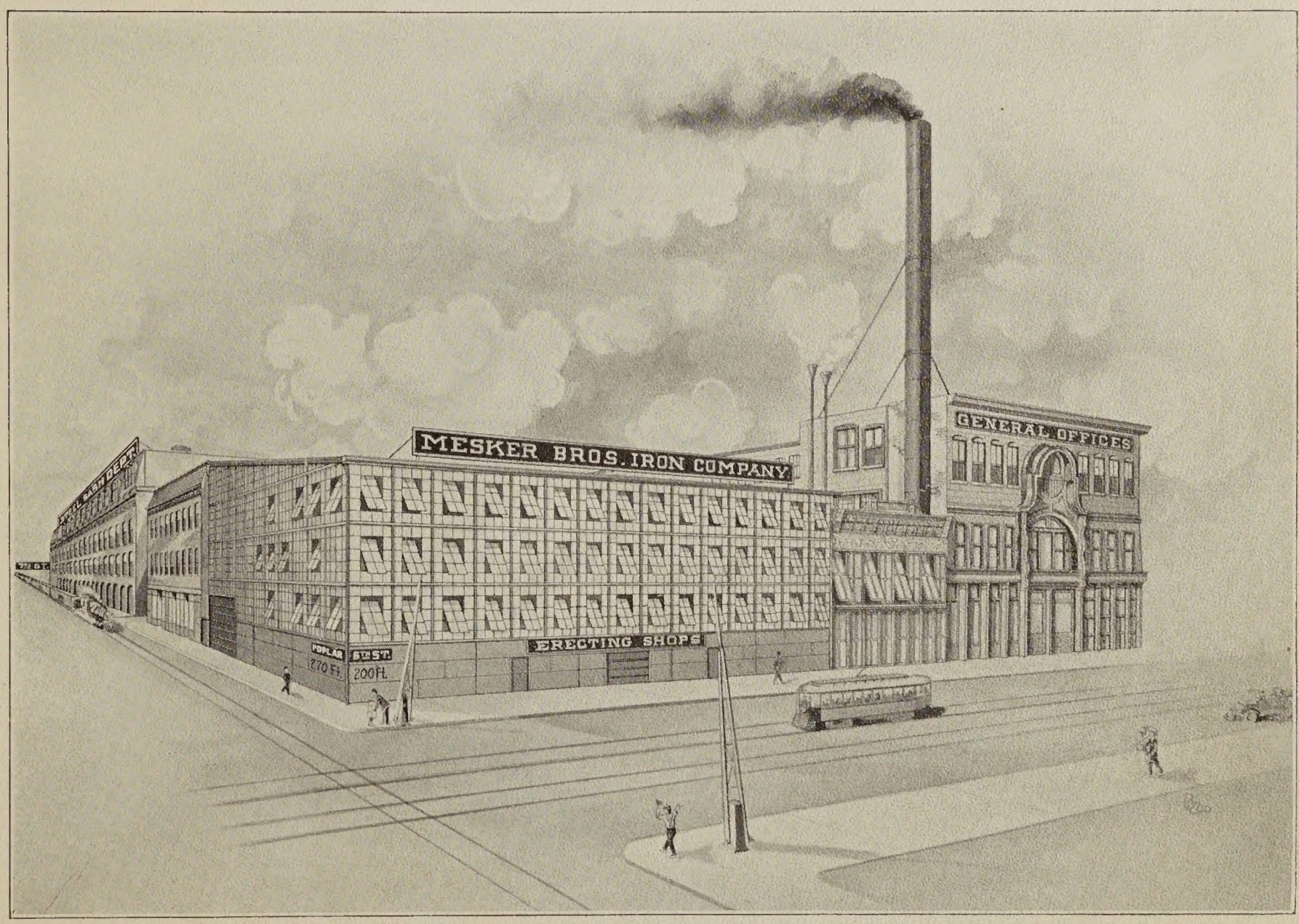
STEEL AND GLASS CORRIDOR PARTITIONS.

the utility of our products has extended to almost every class of building.

The improvements that are constantly being made in the construction and application of the Mesker Products, make it impossible to attempt to embody in this catalog all of the many and varied uses to which they can be applied.

Their superior merits have created a standard that is recognized by leading Architects, Engineers, Contractors and Fire Prevention Bureaus throughout the entire country.

Our Engineering and Sales Departments will lend every assistance in submitting special designs and prices to meet the requirements of any possible condition of construction.



Executive Offices and Factories: Sixth, Poplar and Seventh Streets, St. Louis, Missouri, U. S. A.

Buildings Equipped With the Mesker Hollow Metal, Wire Glass Windows

(1) D. L. & W. R. R. Locomotive Shops, Scranton, Pa.
G. J. Ray, Chief Engr. Frank J. Nies, Archt.

(2) St. L. & S. W. R. R. (Cotton Belt) Freight House, St. Louis, Mo.
J. S. Berry, Supt., B. & B. Thompson & Scott, Contrs.

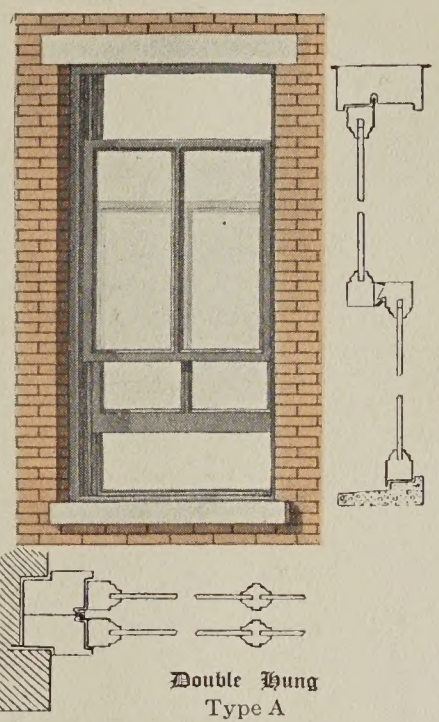
(3) Bank of Commerce and Trust Building,
Hanker & Cairns, Archts. Consolidated Eng. Co., Contrs.

(4) Gloyd Building, Kansas City, Mo. John W. McKecknie, Archt.

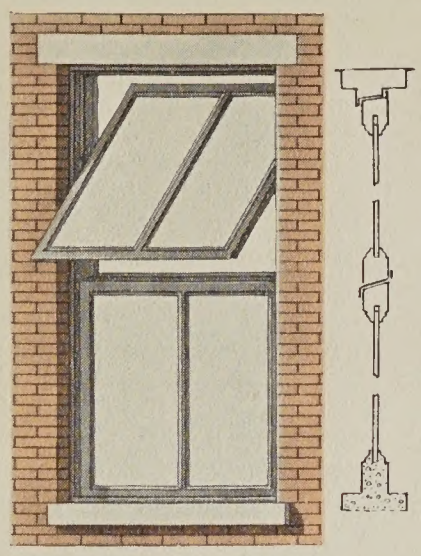
(5) American National Bank Building, Richmond, Va.
Wyatt & Nolting, Archts. A. M. Walkup, Contr.

(6) Free Press Building, Detroit, Mich.
Albert Kahn, Archt. Bryant & Detweiler, Contrs.

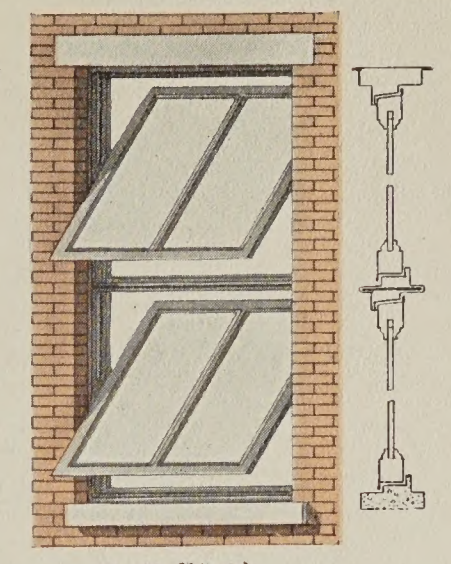
(7) Southwestern Tel. & Tel. Co., (Main Exchange) St. Louis, Mo.



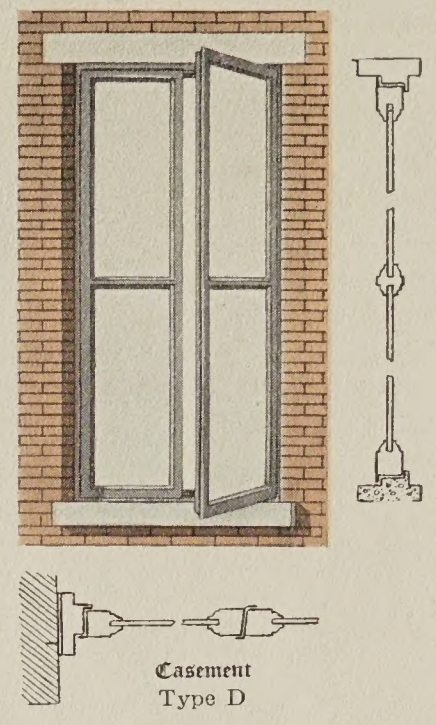
Double Hung
Type A



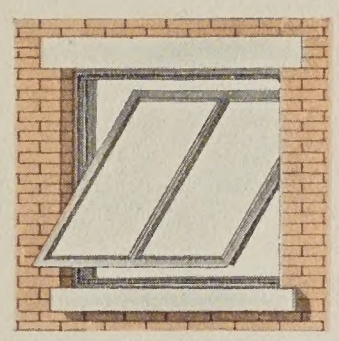
Standard Pivoted
Type B



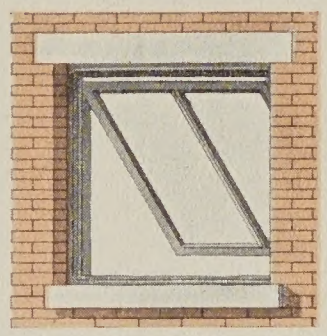
Double Pivoted
Type C



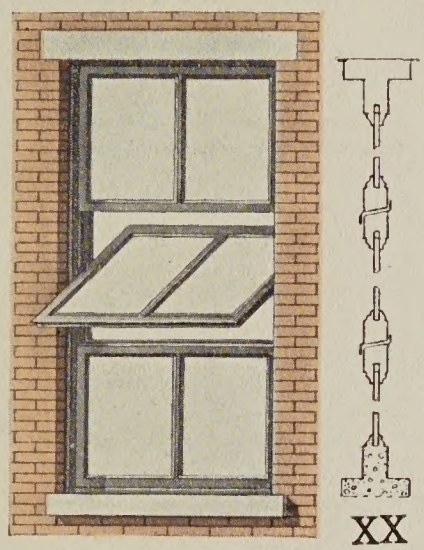
Casement
Type D



Single Pivoted, Type H

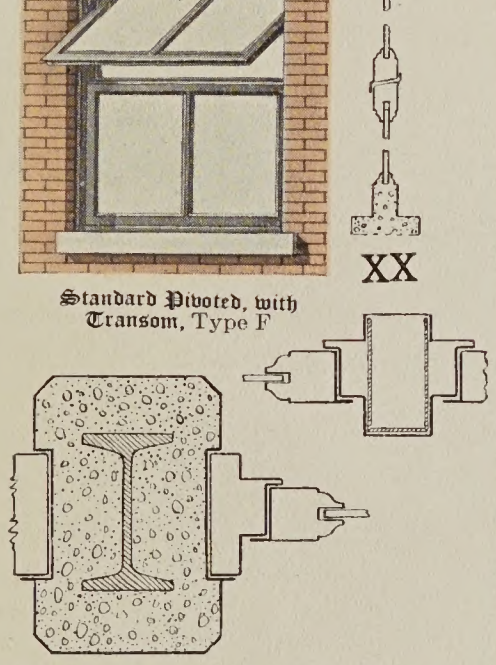


Single Hinged, Type K

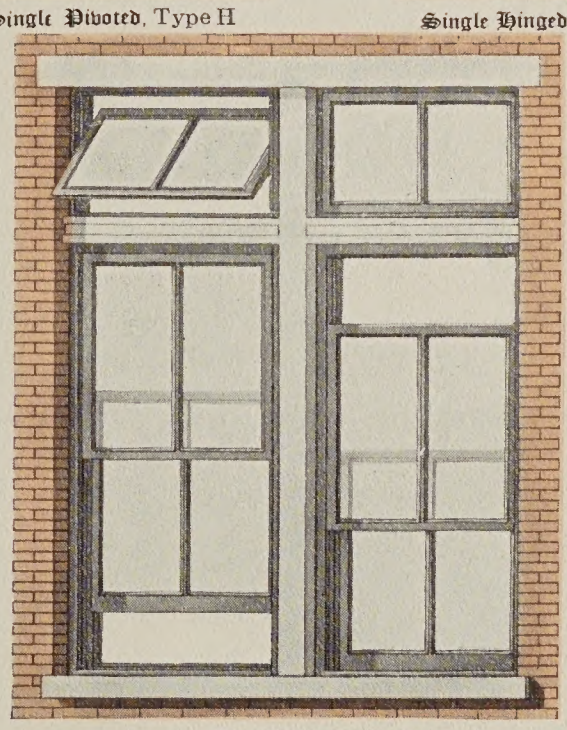


Standard Pivoted, with Transom, Type F

XX

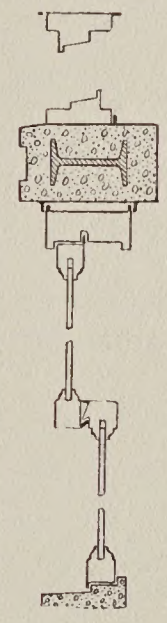


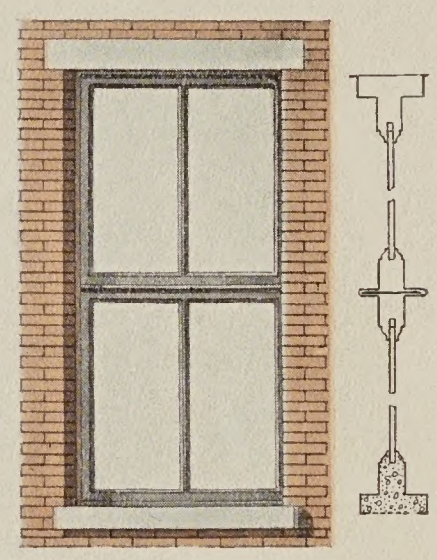
Underwriters' Approved Mullion, for Pivoted, Hinged Casement or Stationary Windows



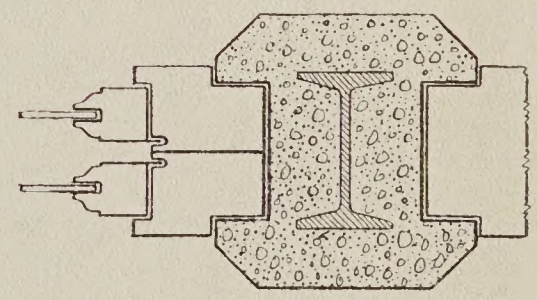
Twin Double Hung
Type G

X





Stationary Type E



Underwriters' Approved Mullion, for Double Hung Windows

Fireproof Hollow Metal, Wire Glass Windows

Labeled Under the Direction of the Underwriters' Laboratories, Inc., Chicago, Ills.

For New or Old Buildings

The Mesker Hollow Metal Windows are designed along the same lines as wood windows retaining the same amount of light area and containing from 10 to 20% more glass surface than any other metal windows on the market.

We supply them complete, inclusive of hardware, sash weights and chains, fusible links for pivoted windows, ¼ in. rough, ribbed, prism or polished wire glass. Glass shipped separately. Frames and sash are made of No. 24 galvanized steel or 20 oz. copper as required by Underwriters. Hardware is galvanized but may be of any other finish at slight additional cost.

We manufacture the following types of approved windows; Double Hung, Standard Pivoted, Double Pivoted, Casement, Single Pivoted, Single Hinged, Stationary and Vertically Pivoted.

Stationary, pivoted or hinged transoms may be used over all types of windows. When used over windows 9′0″ or less in height they will appear as in type F., if over 9′0″ in height they will appear as in Type G. Windows are made in twin, triple, quadruple, etc. form. Illustrations show the forms of mullions used where openings exceed 5′0″ in width and 5′0″ in height simultaneously. Mullions are 5″x″9 reinforced with "I" beams. Openings more than 9′0″ in height and any width must have transom bar X also reinforced with "I" beam as in Type G.

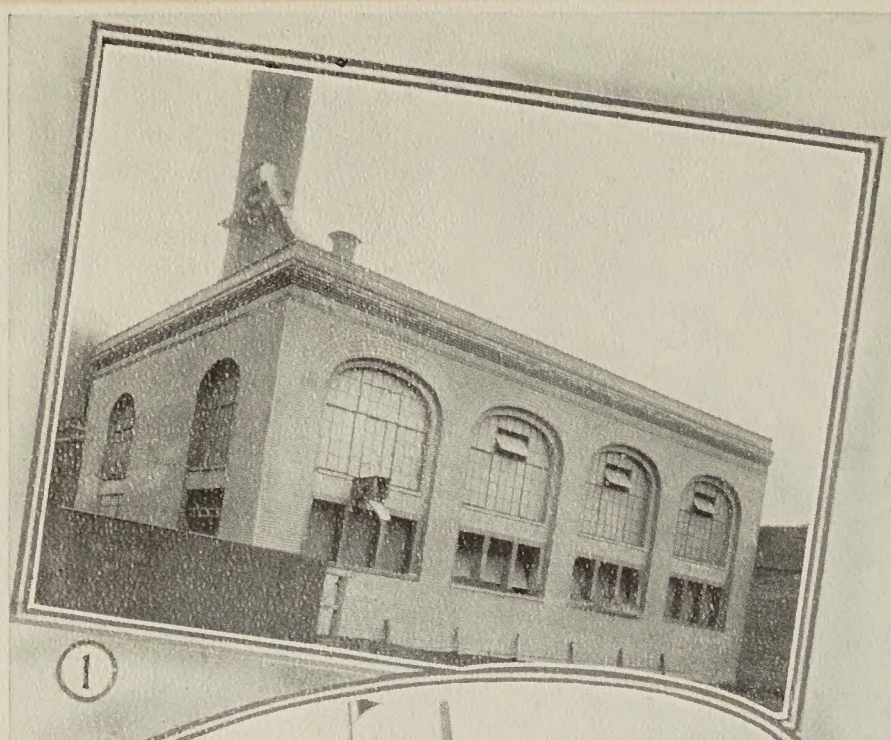
Where openings do not exceed 9′0″ in width and 5′0″ in height simultaneously, a sheet metal mullion without beams as shown by XX may be used. All mullions and transom bars reinforced with beams must also be filled with concrete at building, like the sub-sills.

The Underwriters' label is a guarantee that windows comply with every requirement and are accepted everywhere by rating bureaus as standard. Full instructions for setting frames, hanging and adjusting and glazing of the sash, are furnished enabling any mechanics to install them.

Send schedule of sizes and types of windows and quotations will follow by mail or wire.

Reference:—Lack of space permits only the listing of a few of over 5000 installations of the Mesker Window located in every section of the country. See page 21.

Mesker Brothers Iron Company, Saint Louis, Missouri



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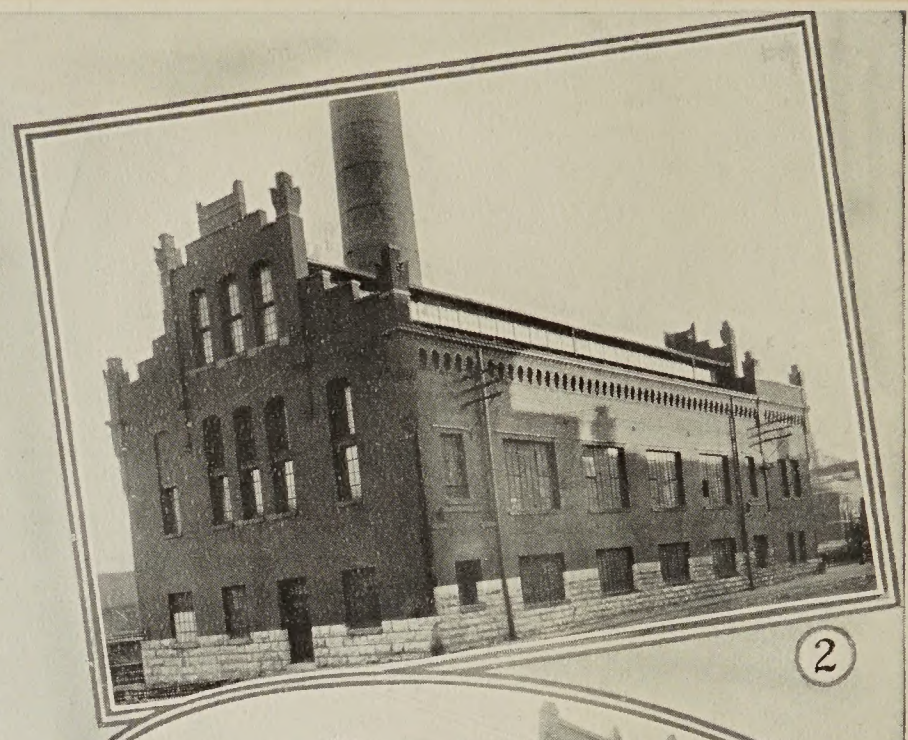

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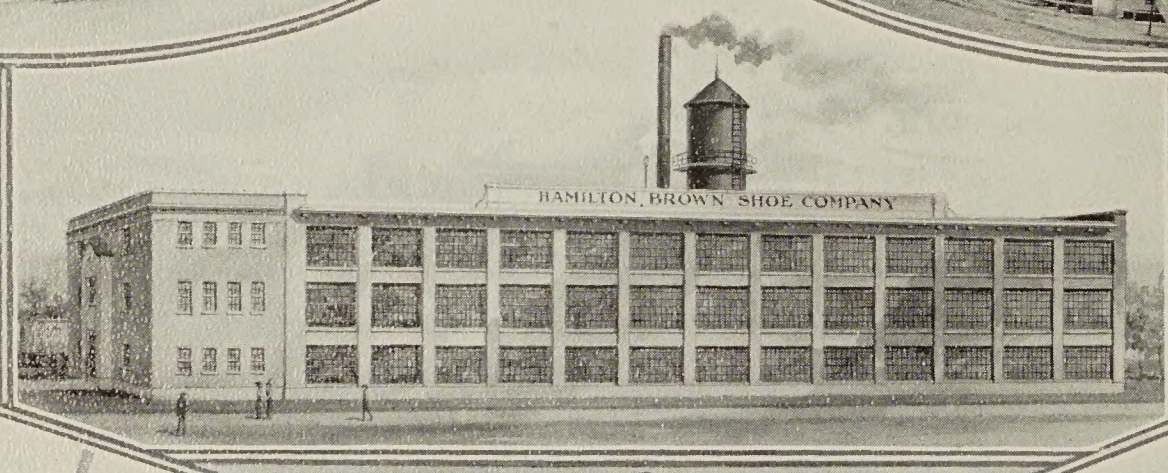

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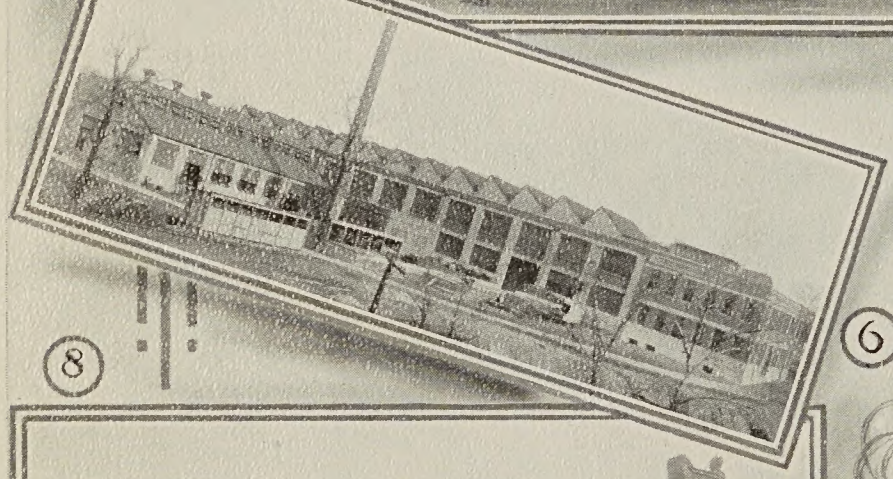

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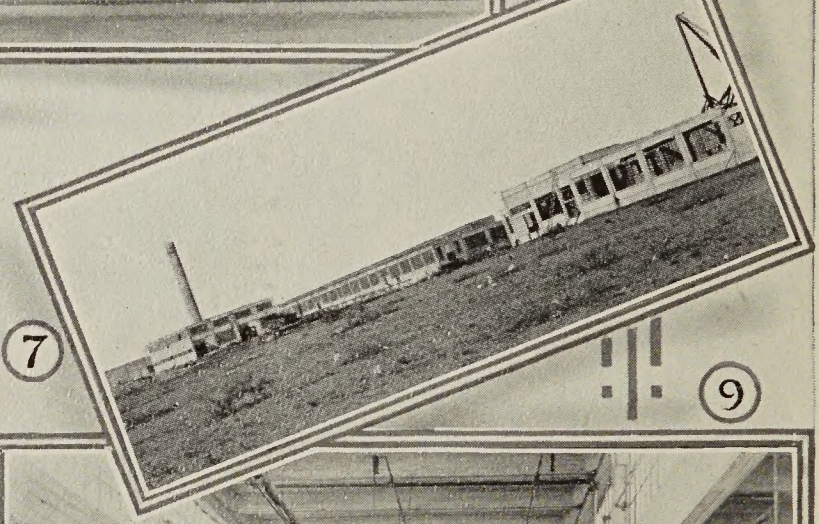
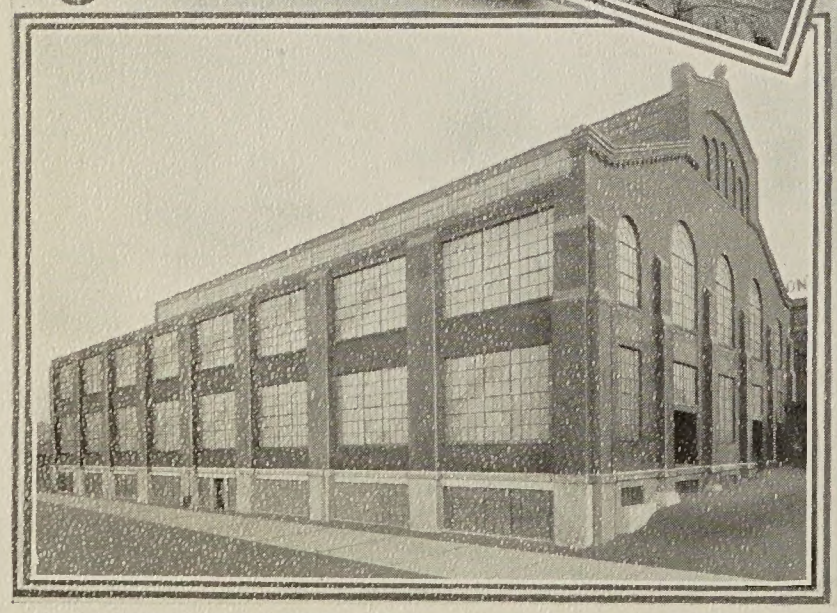


7

8



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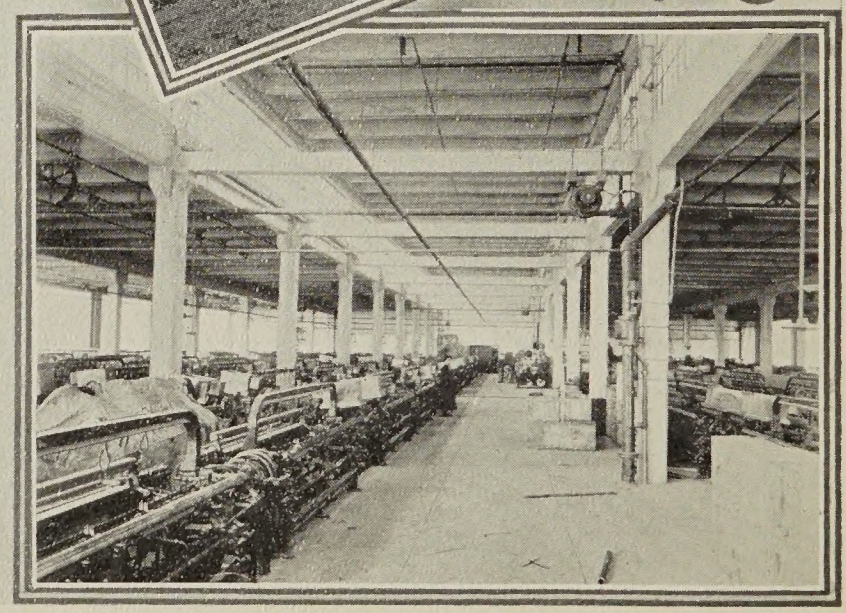


Buildings Equipped With the Mesker Solid-Section Steel Sash

(1) Wainwright Brewery, Power House, St. Louis, Mo.
Widmann & Walsh, Archts. Kellerman Contr. Co.

(2) Anheuser-Busch Brewing Assoc., Power House, St. Louis, Mo.
Widman & Walsh, Archts. Kellerman Contr. Co.

(3) Libby-McNeil & Libby, Fruit Canning Factory, Sacramento, Cal.
Philip Larman, Archt. Thos. H. Day's Sons, Contrs.

(4) Southern Mfg. Co., Warehouse, Richmond, Va.
Albert F. Huntt, Archt. J. T. Nuckols, Contr.

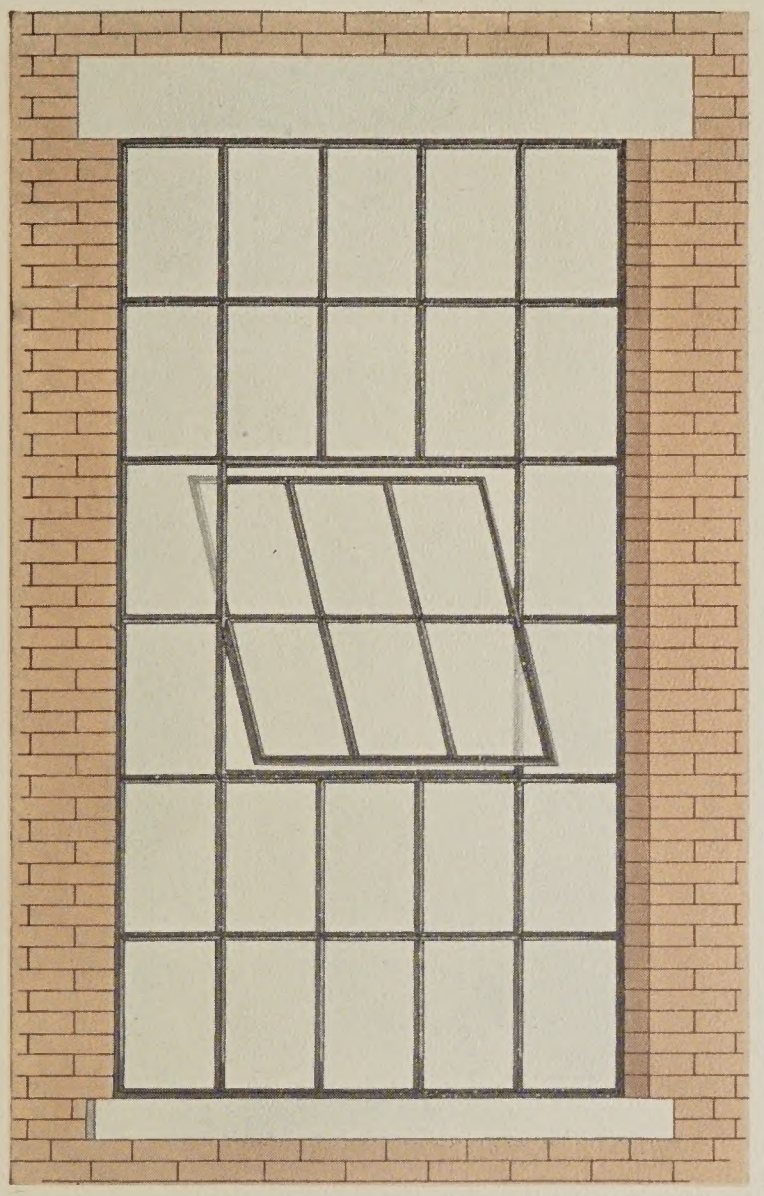
(5) Hamilton Brown Shoe Co., Union, Mo.
Isaac S. Taylor, Archt. A. J. Gorg, Contr.

(6) Barry-Wehmiller Mach. Co., Power House, St. Louis, Mo.
Widmann & Walsh, Archts. Gilsonite Constr. Co.

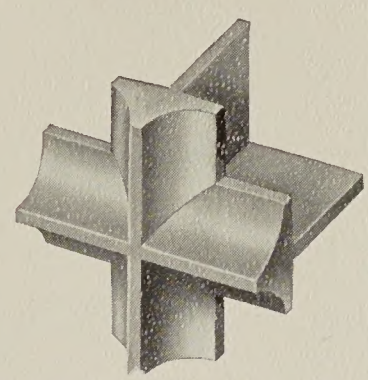
(7) Postex Cotton Mills, Power House, Post City, Texas. Unit Constr. Co.

(8) Leschen Rope Co., St. Louis, Mo.
Guy C. Mariner, Archt. James Stewart & Co., Contrs.

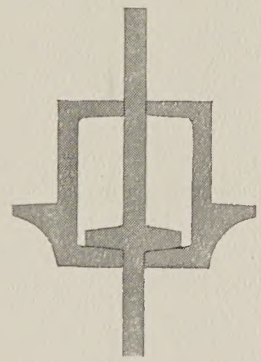
(9) Postex Cotton Mills, Interior View. Post City, Texas.



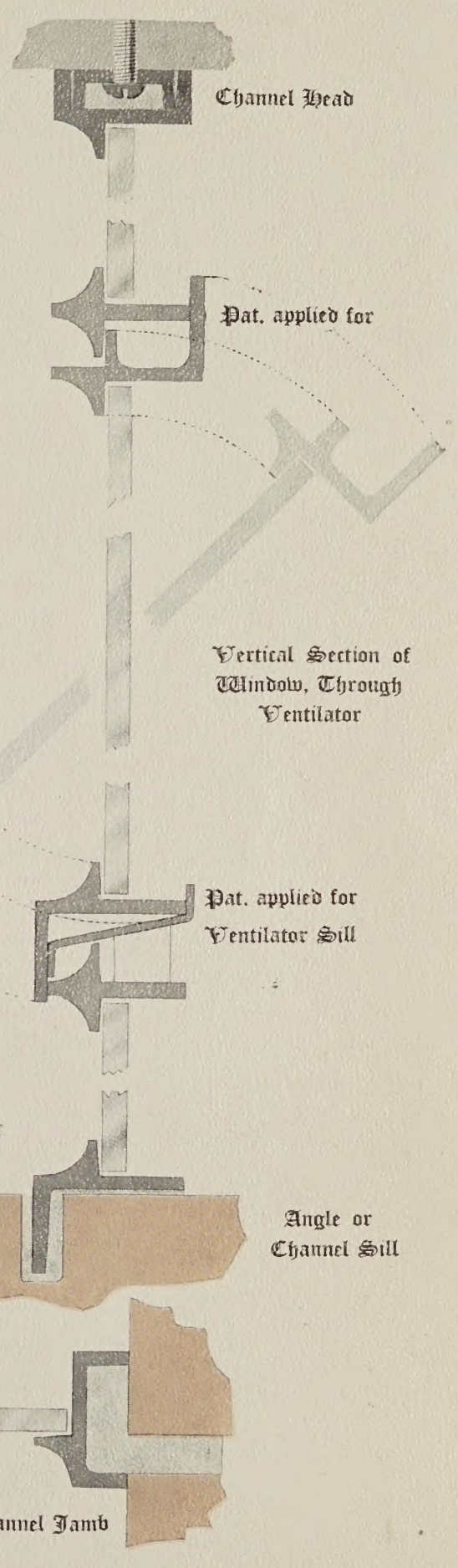
A Solid Section Steel Window Installed

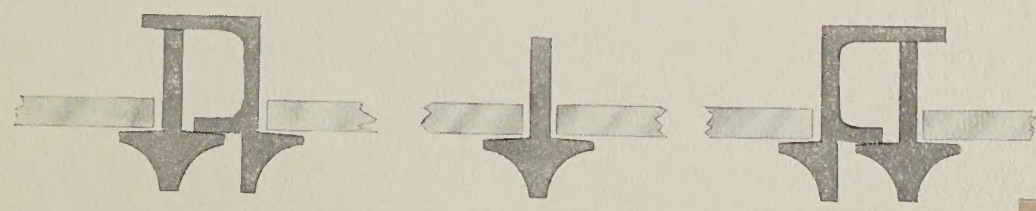


Intersection of Muntins

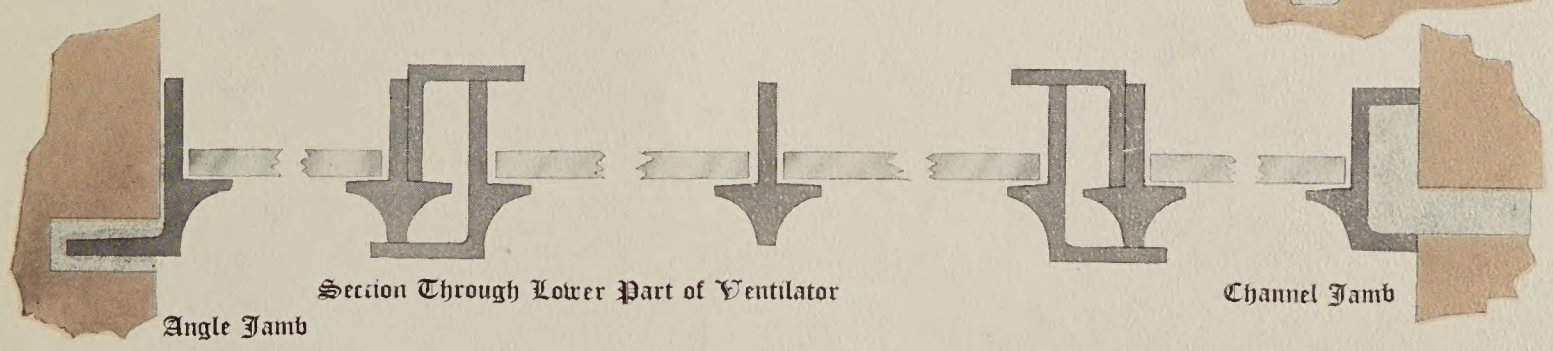


Section of Mullion





Section Through Upper Part of Ventilator



Section Through Lower Part of Ventilator

Solid Section Steel Sash

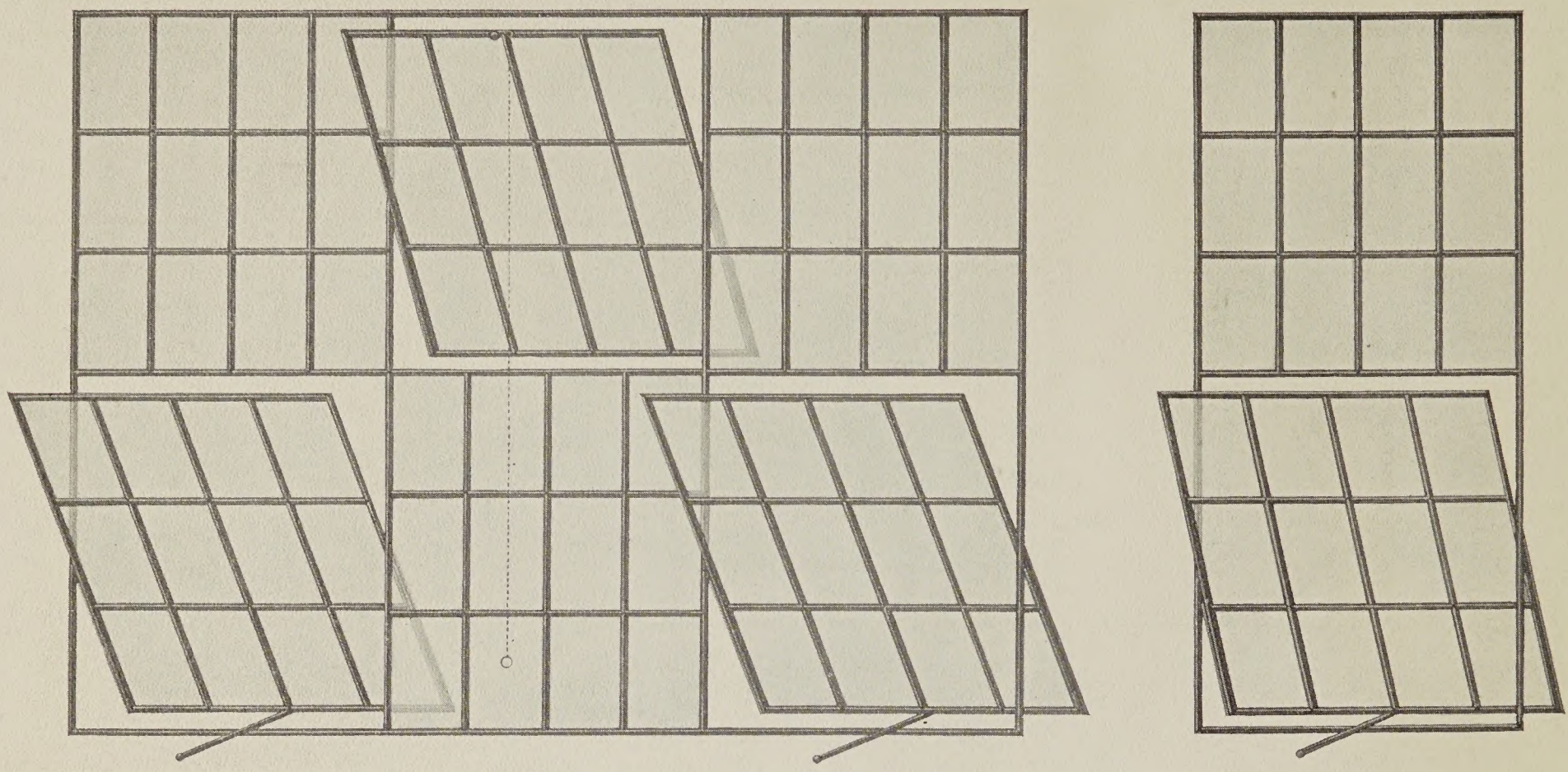
The Mesker Steel Sash is made of special sections rolled from our own rolls of soft steel.

All the inter-sections of joints are weather and water proof and possess the maximum rigidity of the fully developed section, due to our original method of construction. There can be no lateral deflection from wind pressure under the most severe storm conditions.

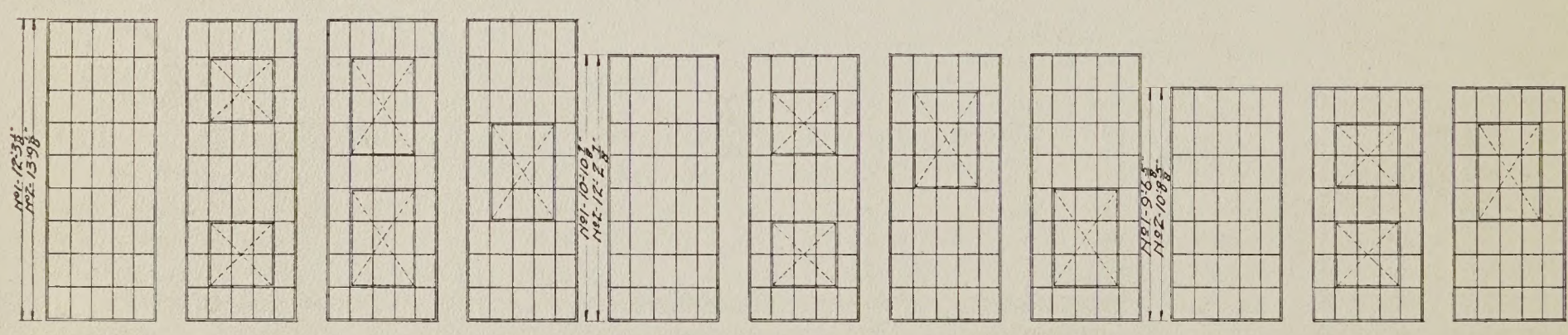
The Sash combines the **maximum light** and **ventilating** area with the **highest efficiency** and **economy** in construction, presenting at the same time an attractive appearance.

Sash can be made horizontally or vertically pivoted, top or bottom hinged, casement, counter-balance, stationary or of special construction for monitors and saw tooth skylights.

Monitor Sash can be operated singly, in multiples or the entire length, by specially constructed sash operators.

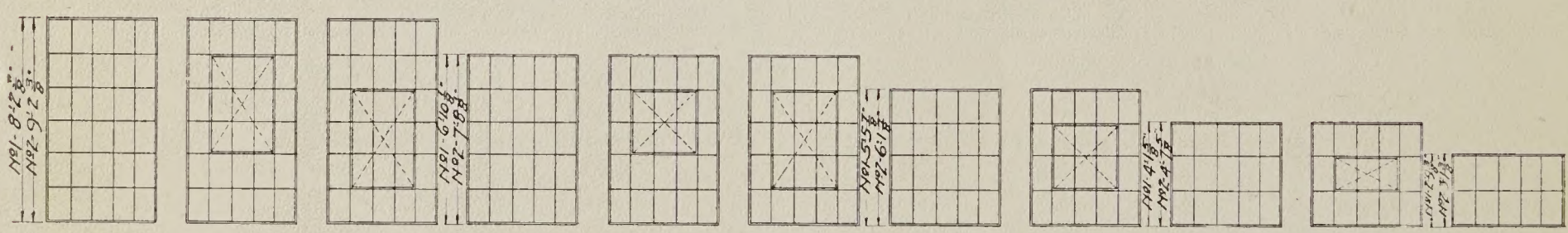


Solid Section Steel Sash Combinations



No. 1-1 No. 2-1 | No. 1-2 No. 2-2 | No. 1-3 No. 2-3 | No. 1-4 No. 2-4 | No. 1-5 No. 2-5 | No. 1-6 No. 2-6 | No. 1-7 No. 2-7 | No. 1-8 No. 2-8 | No. 1-9 No. 2-9 | No. 1-10 No. 2-10 | No. 1-11 No. 2-11

No. 1 Glass 10x 16 — No. 2 Glass 12x18

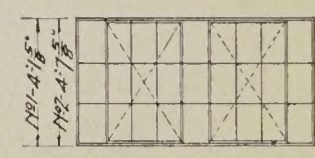


No. 1-12 No. 2-12 | No. 1-13 No. 2-13 | No. 1-14 No. 2-14 | No. 1-15 No. 2-15 | No. 1-16 No. 2-16 | No. 1-17 No. 2-17 | No. 1-18 No. 2-18 | No. 1-19 No. 2-19 | No. 1-20 No. 2-20 | No. 1-21 No. 2-21 | No. 1-22 No. 2-22

Standard Units of Fireproof Solid-Section Steel Sash

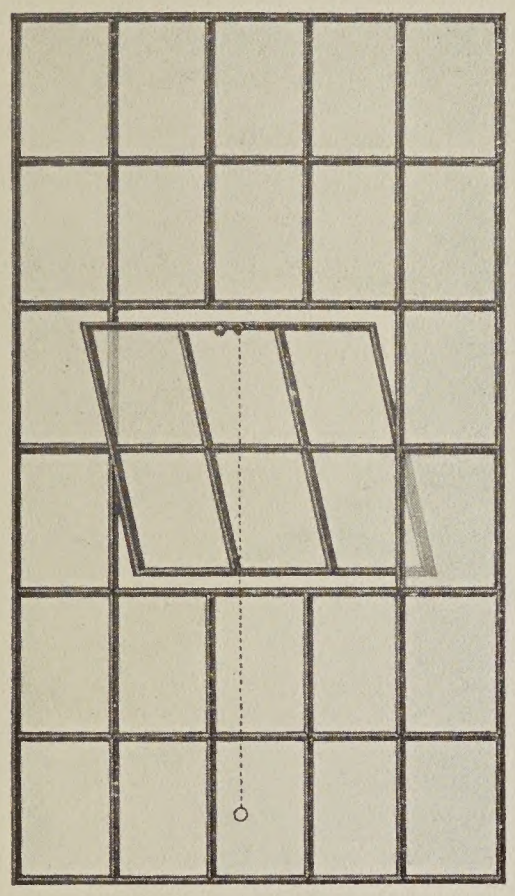
Over-All Widths of One or More Units

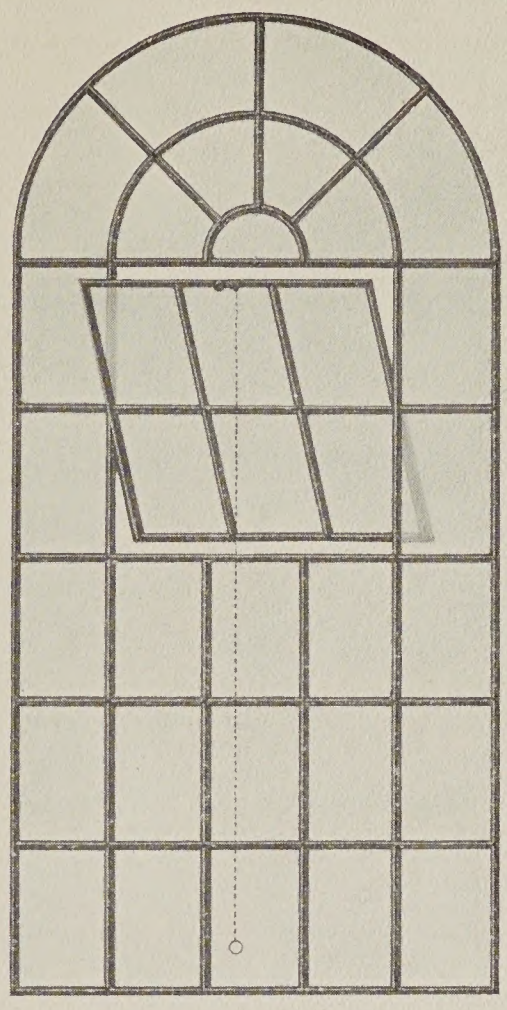
	No. 1. 10x16 Glass 4 Lts. wide	5 Lts. wide	6 Lts. wide	9 Lts. wide		No. 2. 12x18 Glass 4 Lts. wide	5 Lts. wide	6 Lts wide	9 Lts. wide
1-unit	3′-6⅜″	4′-4¾″	5′-3⅛″	7′-10¼″	1-unit	4′-2⅜″	5′-2¾″	6′-3⅛″	9′-4¼″
2-unit	7′-0¾″	8′-9½″	10′-6¼″	15′-8½″	2-unit	8′-4¾″	10′-5½″	12′-6¼″	18′-8½″
3-unit	10′-7⅛″	13′-2¼″	15′-9⅜″	23′-6¾″	3-unit	12′-7⅛″	15′-8¼″	18′-9⅜″	28′-0¾″
4-unit	14′-1½″	17′-7″	21′-0½″	31′-5″	4-unit	16′-9½″	20′-11″	24′-0½″	37′-5′

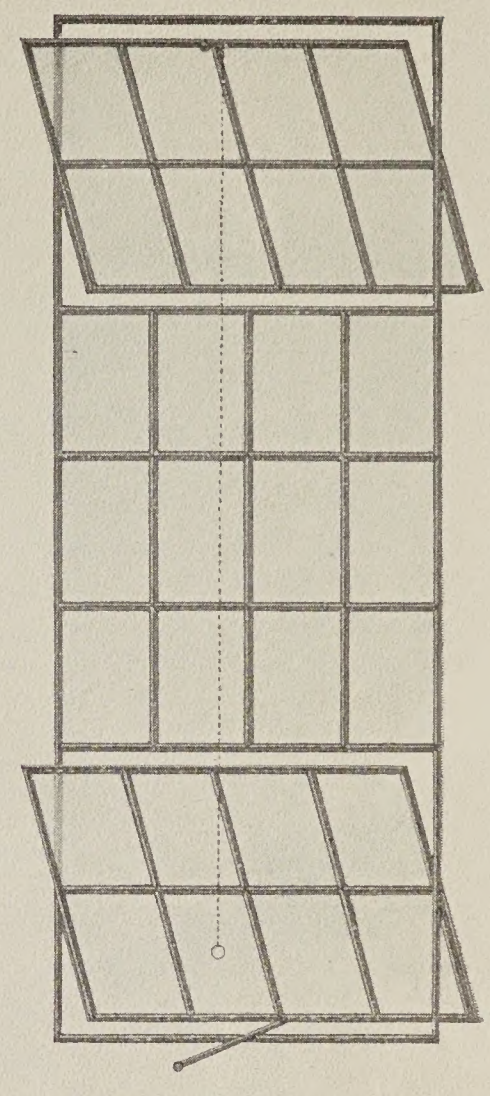


Monitor Window

Lack of Space Prevents Illustrating Many Other Units Manufactured by Us







Unit Combinations:—Our units offer a wide scope of combinations for the complete lighting and proper ventilating of Factory Buildings, Office Buildings, etc.

The maximum size of a single unit, when glass 12″x18″ is used, is seven lights wide and nine lights high. Any number of units may be made in combination by the use of our special mullion bar, which is designed with a view to giving the additional stiffness required when the number of units in combination presents a large glass area and to counteract wind pressure.

Ventilators:—The ventilators are of the double contact type, insuring a non-leakable weather proof sash.

Cleaning:—The ventilators can be easily removed and replaced for cleaning.

Welding:—We use the Autogenous method of welding at the intersection of the muntins, but when desired all exterior joints may be welded at a slight additional cost. Our method of welding increases the rigidity of the joints and adds to its weather resisting qualities.

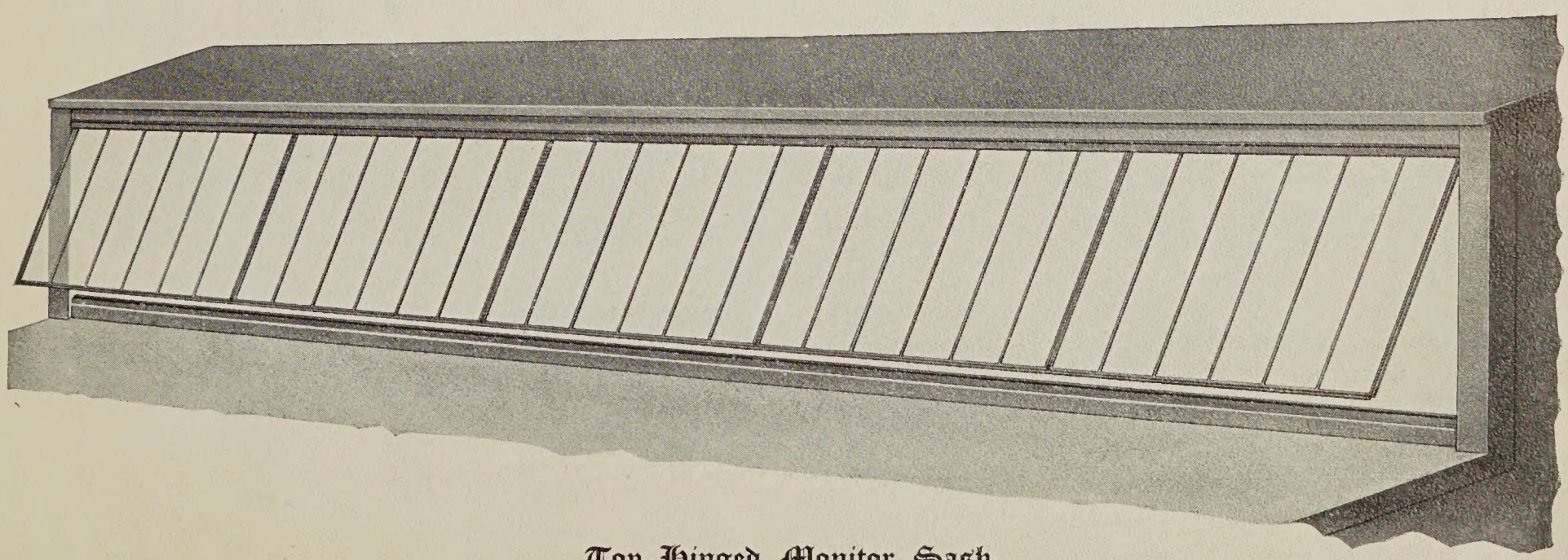
Glazing:—Our glazing clip is of special design, so devised to hold the glass firmly in place while being glazed.

Inspection:—Our sash are subjected to the most rigid inspection before shipping, thus insuring satisfaction upon arrival at destination.

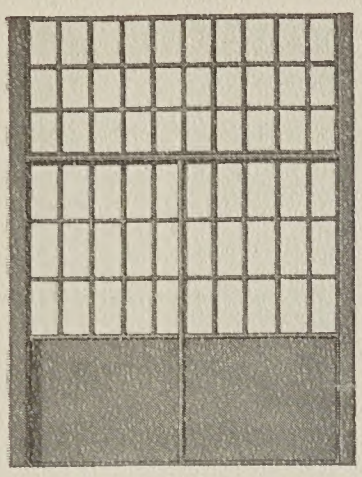
Installation:—The Mesker Sash are easily installed and full directions accompany each shipment.

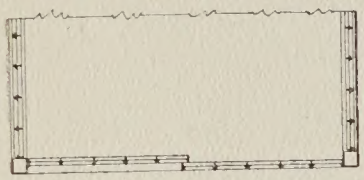
Painting:—All sash receive one coat of paint before leaving our works.

References:—We give only a partial list of over 1000 installations of the Mesker Sash in every kind of building. See page 21.



Top Hinged Monitor Sash





The Mesker Steel Elevator Enclosures

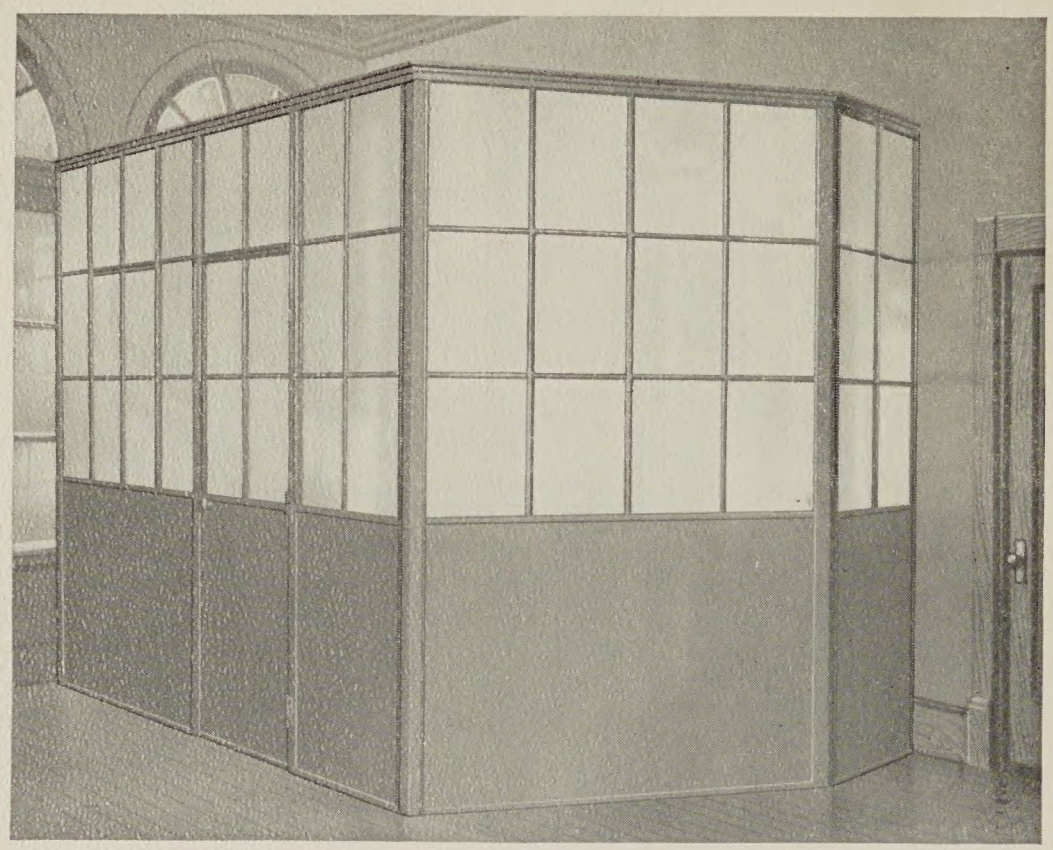
The old style elevator enclosures are rapidly disappearing. Architects and Engineers are specifying steel elevator enclosures with wire glass.

Steel elevator enclosures are more economical than the old cast or wrot grille construction, are fire proof and the glass panels enable the elevator operator to see through the enclosures, thereby preventing accidents. The application of the principle of "safety first" in all public office buildings, hotels, factories, etc. is demanding enclosures with wire glass.

The upper portion is of the same construction as our solid section steel sash described on pages 5, 6 and 7. For office buildings and hotels the lights are usually of polished wire glass. The lower portion is of plate steel with reinforcing where necessary. We can furnish the enclosures plain or ornamented by using drawn steel mouldings, cast ornaments and rosettes.

The doors are of the usual sliding pattern and are equipped with all attachments for the reception of the hardware. Hardware not furnished by us.

Prices upon application. Give dimensions.

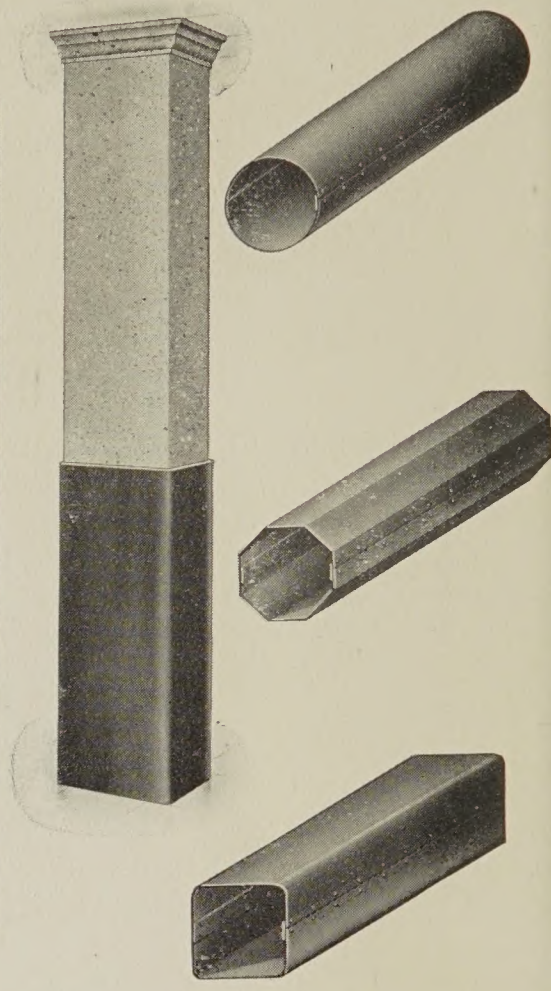


The Mesker Steel Interior Partitions

Steel interior partitions are rapidly supplanting the old wood partitions for offices and corridors. They occupy less space than the old style wood, tile, concrete or lath and plaster partitions, and present a far better appearance. They are fire-proof and cost less than wood, concrete, tile or lath and plaster partitions.

With the increasing demand for fire protection, architects everywhere are specifying steel and glass partitions. The upper portion consists of our solid section steel sash construction as described on pages 5, 6 and 7. The lower part is of No. 12 or 14 plate steel. They may be glazed with either wire glass, double or single strength, obscure or prism glass.

Prices upon application; give dimensions.

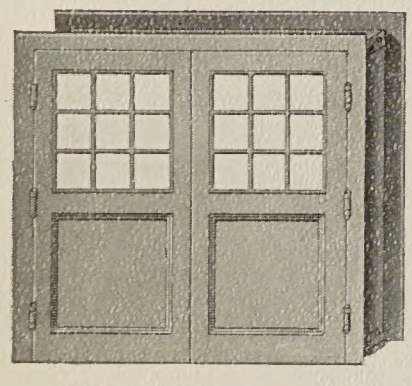


The Mesker Plate Steel Dadoes or Guards for Concrete Columns

We show three styles of our plate steel guards for concrete columns—cylindrical, octagonal and square. They are used in modern warehouse and factory buildings to prevent the chipping of the concrete on the lower portion of the column, usually caused by trucking.

Steel Guards for concrete columns can be made in any style, any diameter or length and any thickness of metal. They are made in two sections with a splice plate on the underside, or welded at corner, at a small increase in cost.

Prices upon application.



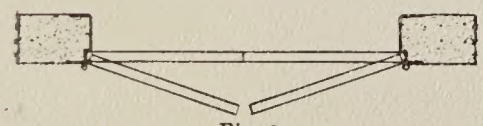
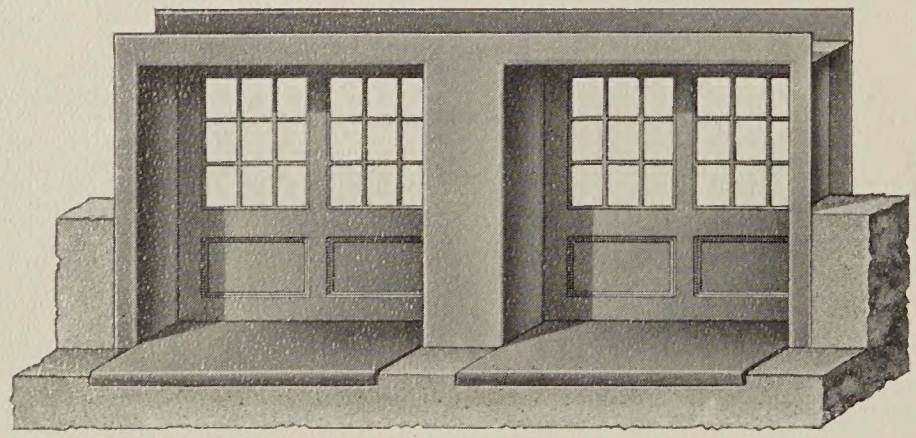


Fig. 1.



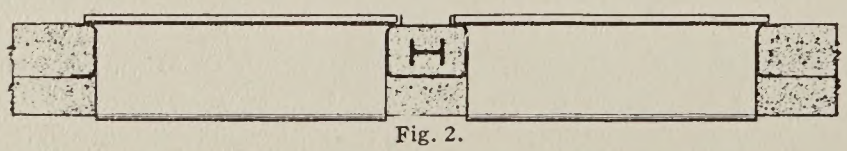
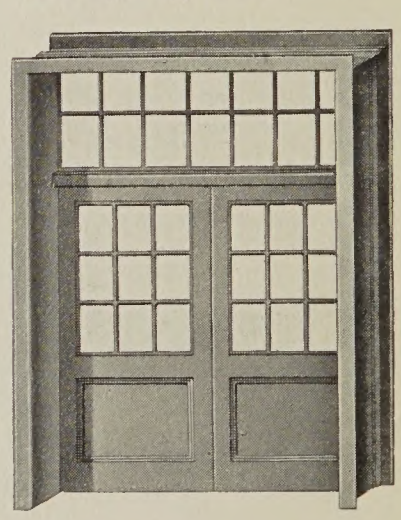


Fig. 2.



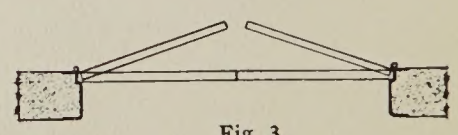


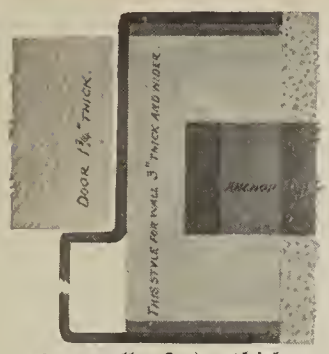
Fig. 3.

The Mesker Plate Steel Doors, Jambs and Sills, for Warehouses and Factories

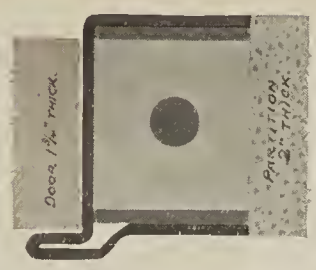
We illustrate our plate steel doors, jambs and sills for warehouses and factories. Figure 1 shows the exterior while figure 3 shows an interior view of the door with transom above. Figure 2 shows two doors with pier between. The doors are made of plate steel of any thickness from No. 12 gauge to ⅜″ and cover the entire width of the jamb and head. The sash panels and transoms are of the same construction as our solid section steel sash.

The sills are made of plate steel from 3/16″ to ¾″ thick with risers usually 3″ deep. The jambs, heads and sills can be made any width or length, they have slightly rounded corners to prevent trucks and wagons from damaging same.

We furnish the doors with hardware complete, also wire glass if required. Prices upon application. Give dimension and thickness of walls.



For walls 3 in. thick and over

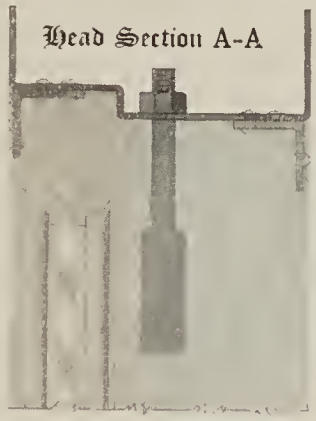


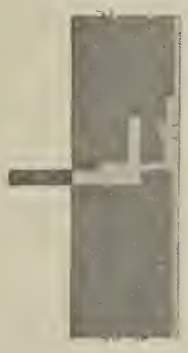
For walls 2 in. thick

For walls 1¾ in. thick

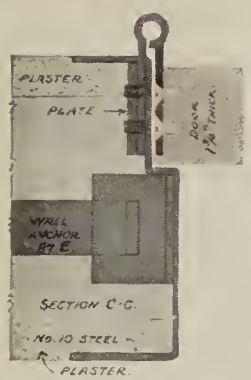
For walls 1½ in. thick

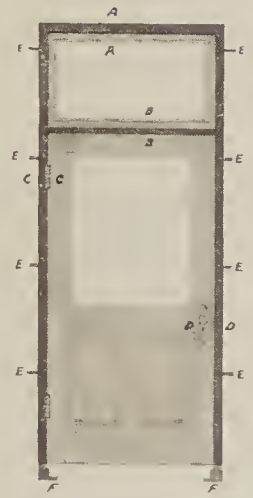
Sections of Door Frames



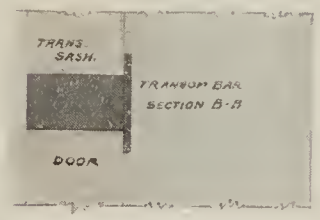


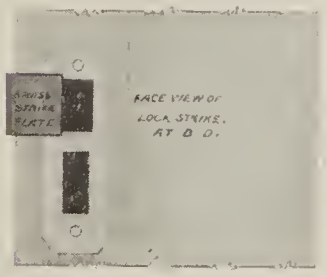
Anchor at E

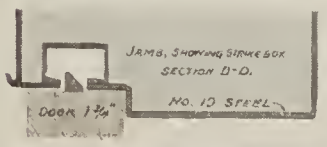




Foot Anchor at F







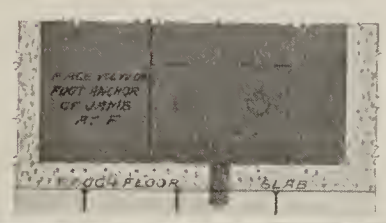


Plate Steel Door Frames and Jambs

The elevation and details illustrate the Mesker Plate Steel Door Frames or Jambs for modern fire-proof sanitary buildings. The jambs are especially adapted for Hospitals, Sanitariums, Hotels, Office Buildings, Libraries, Theaters, Schools, Colleges, Court Houses or other structures of a permanent high class character.

The Plate Steel Frames or Jambs will not warp, crack or swell and have no crevices for the accumulation of dirt.

We recently installed over **3000 door frames and transoms** made of No. 10 blue annealed steel for the new General Hospital, Cincinnati Ohio, designed by Messrs. **Samuel B. Hannaford & Sons, Architects.**

This hospital ranks as the finest in the United States.

Illustrations show jambs for partitions 1½", 1¾", 2" or 3" to any thickness.

The door frames or jambs are superior in every way to the old built-up style of frame and on account of its low cost is being generally specified by the leading architects.

When the Mesker Door Frames or Jambs are used it is not necessary to have any other finish or trim.

The Frames are made of **No. 10 blue annealed steel,** with round or square corners and are fitted with angle connections and anchors for brick, stone, tile, fire proof blocks or concrete walls. The jamb and head covers the entire face of the opening and on account of its great strength it is not necessary to use lintels over the opening or wood bucks at the sides.

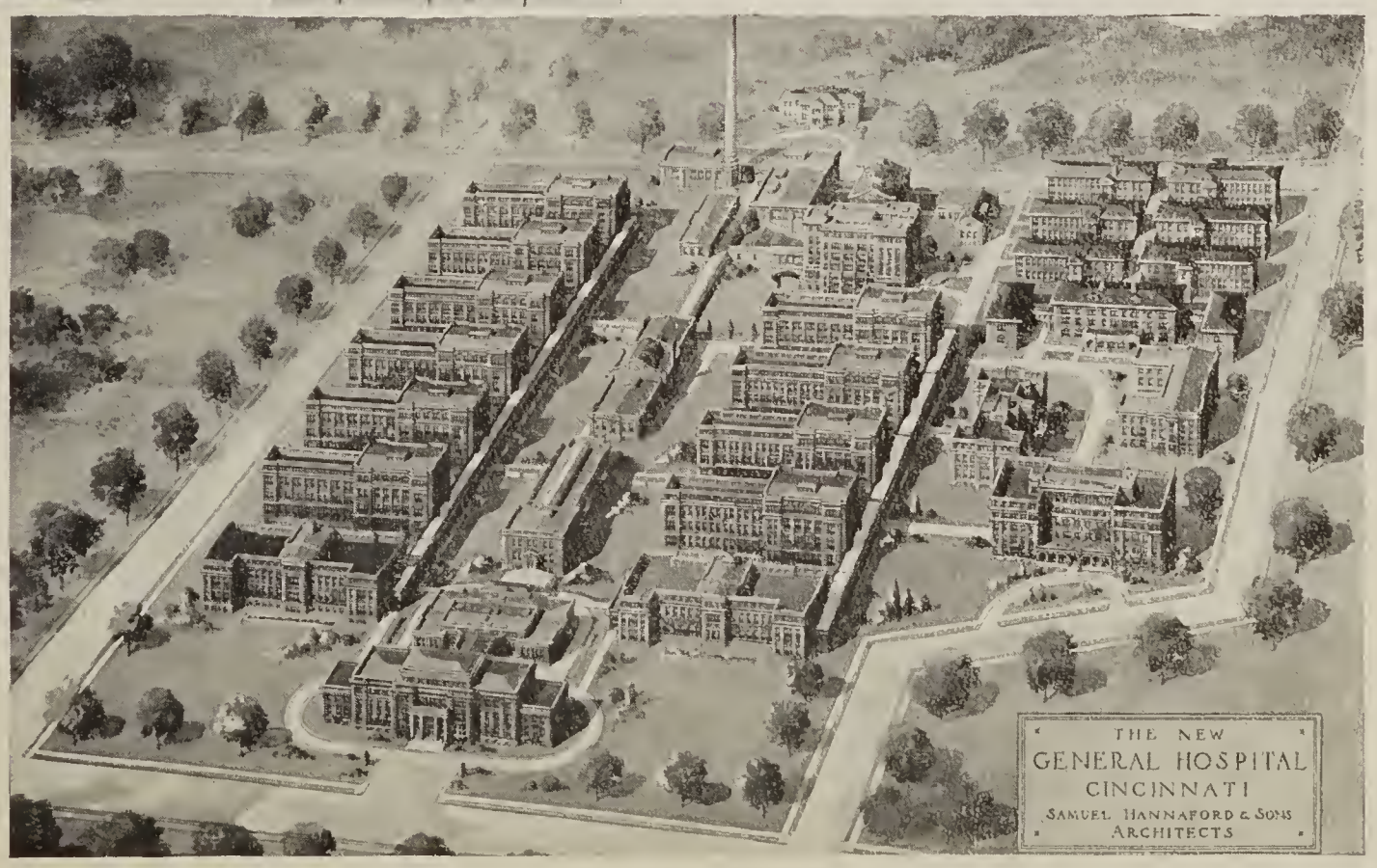
When desired, we can **weld** the joint at the intersection of the head and jamb, making a **one piece continuous plate door frame** at a small extra cost.

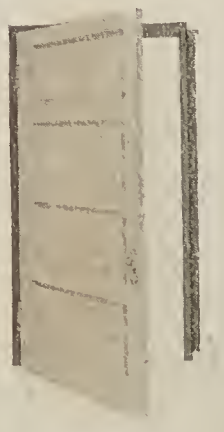
The jambs are slotted for the reception of the butts and strike plates which are usually furnished by the contractor, but are put on at our factory.

Our Jambs can be used in connection with any style of door, metal covered, hollow metal, or wood doors from 1¾" to 1⅜" thick.

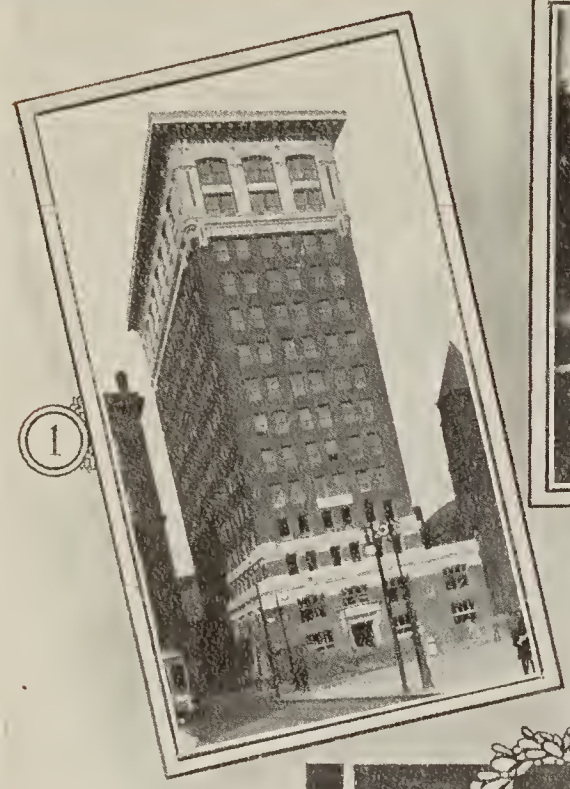
Prices:—The price depends on the number and sizes required. We are always pleased to quote upon application.

Left Swing





Right Swing



Buildings in Which the Mesker Patent Combination Steel and Concrete Interior Stairs are Installed

(1) New Power & Light Building, Cleveland Ohio.—See page 11, No. 4.
Hubbell & Benes, Archts. James L. Stuart, Contr.

(2) State Normal School, Maryville, Mo. J. H. Felt & Co., Archts., Kansas City, Mo.

(3) New Gibson House, Cincinnati, Ohio.—See page 11, No. 5.
Gustave W. Drach, Archt., Wells Bros. Co., Contrs.

(4) Rike-Kumler Dept. Store, Dayton Ohio.
Schenck & Williams, Archts. See page 11, No 3.

(5) Commercial Building, Belleville, Ills. See page 11, No. 2.
Riester & Rubach, Archts. Bauer Bros., Contrs.

(6) New W. C. A. Building, Dayton, Ohio. Schenck & Williams, Archts.

(7) Beaver Power Bldg. No. 1, Dayton, Ohio. Schenck & Williams, Archts.

(8) Bemis Bro. Bag Co., St. Louis, Mo. See page 11, No. 1.

(9) Beaver Power Bldg. No. 2, Dayton, Ohio.

The Mesker Patent Combination Steel and Concrete Interior Stairs

Patent No. 964222, July 12, 1910. Other patents pending.

Recent Installations:

(1)	Bemis Bros. Bag Co., St. Louis,	Page 10	No. 8	(4)	New Power & Light Bldg., Cleveland, Ohio,	Page 10	No. 1
(2)	Commercial Building, Belleville, Ill.,	Page 10	No. 5	(5)	New Gibson House, Cincinnati, Ohio,	Page 10	No 3
(3)	Rike-Kumler Co., Dayton, Ohio,	Page 10	No. 4	(6)	Texas Baptist Memorial Sanitarium, C. W. Bulger & Sons, Archts., Dallas, Texas		

Mesker Patent Stair System

The Mesker Patent Steel and Concrete Stairs are specified as a "Standard" throughout the country. The illustrations on opposite page show the varied character of the buildings in which they have been installed.

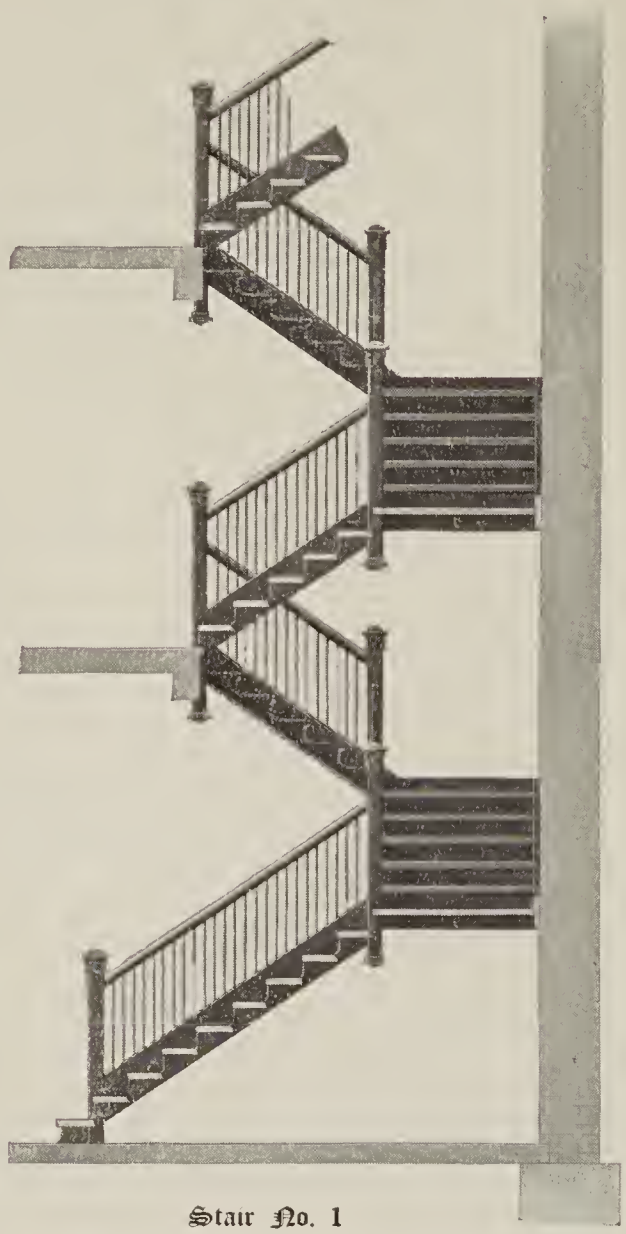
We show only a few photographs of over 1500 installations in various parts of the United States, Canada and Foreign Countries.

Typical Steel and Concrete Stairs

Patent No. 964222, July 12, 1910. Other patents pending.

Combination Steel and Concrete Stair:—The Mesker Patent Steel Stair consists of a frame of steel with treads of concrete 1½″ or more in thickness or any other plastic material, making a complete fire proof stair, meriting the consideration of architects and engineers desiring a stair that is practical, substantial and non-combustible, and at the same time economical in price.

It is light in weight, but exceptionally rigid and firm, having a **safe carrying capacity of 125 lbs. per square foot** not including tread filling. It is easily and quickly erected by any mechanic at a lower cost than wood stairs, and to facilitate the installation, all parts are marked, lettered and numbered. Where the amount of stair work justifies, we will quote same erected in place.



Stair No. 1

4′0″ wide, 11′0″ high, floor to floor, including intermediate platforms, approximate price, $190.00., F. O. B. Cars, St. Louis.

No plastered soffit is necessary, as the stair has practically as good an appearance from the underside as from the top. This stair is especially adapted to Schools, Colleges, Theatres, Office Buildings, Apartment Houses, Store Buildings, Warehouses, Hotels, Power Houses, Foundries, Factory Buildings, Car Barns, Railroad Stations and other industrial and fireproof buildings, as well as high class residences.

Stringers are usually of 10″ or 12″ wide plate steel bent in channel form. **The tread filling prevents accidents from slipping** and experience has shown that the steel and concrete construction is the most reliable stair tread manufactured. They are adapted to any condition or situation where a **safety tread** is needed. If after many years of continued usage, the tread filling should become worn, it can be easily renewed by **recasting concrete** into the worn places, at a nominal cost.

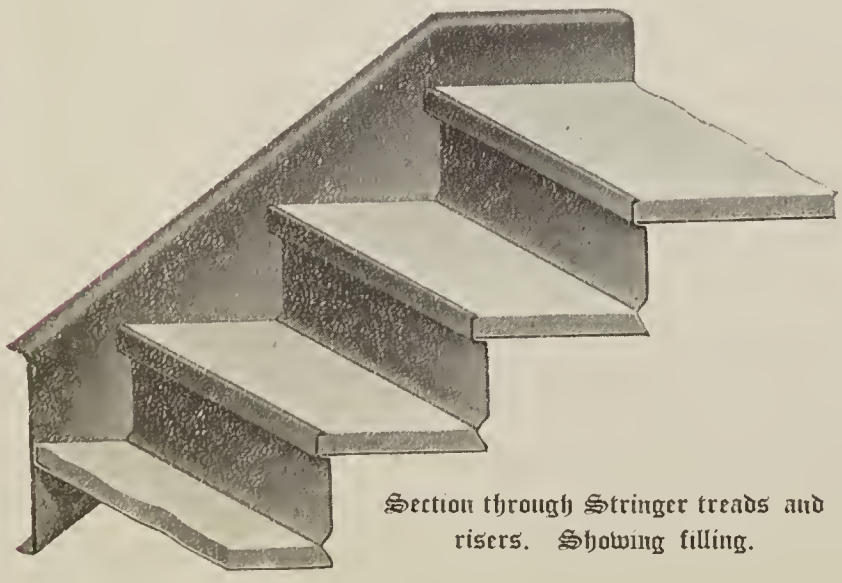
Newels are made of No. 12 gauge blue annealed steel **welded** at corners, making a one piece seamless post with cast caps and pendants, also **welded** to newels.

Treads and Risers are of one continuous steel plate and can be made any desired height and width. The illustration shows a section thru stringers, treads and risers. Treads and risers may be constructed for the reception of marble, tile, slate or rubber composition or any of the safety treads on the market if desired.

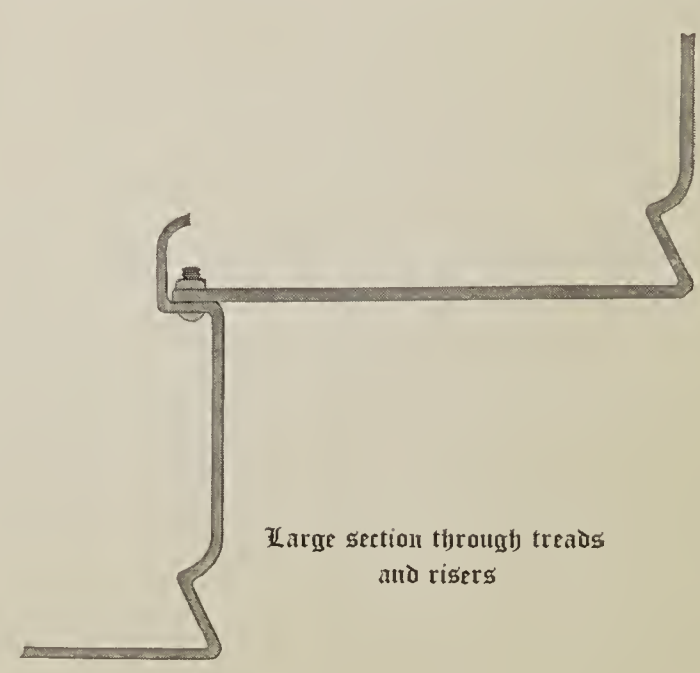
Railings are made to any design, but architects and engineers will find it more economical to incorporate in their details **the railings shown on pages 14, 15 and 16,** which are but a trifle more costly than the plain baluster or pipe railing.

When the width exceeds 6′0″, an intermediate stringer should be used, composed of small channels or angles with filler plates under each tread and riser bolted thereto.

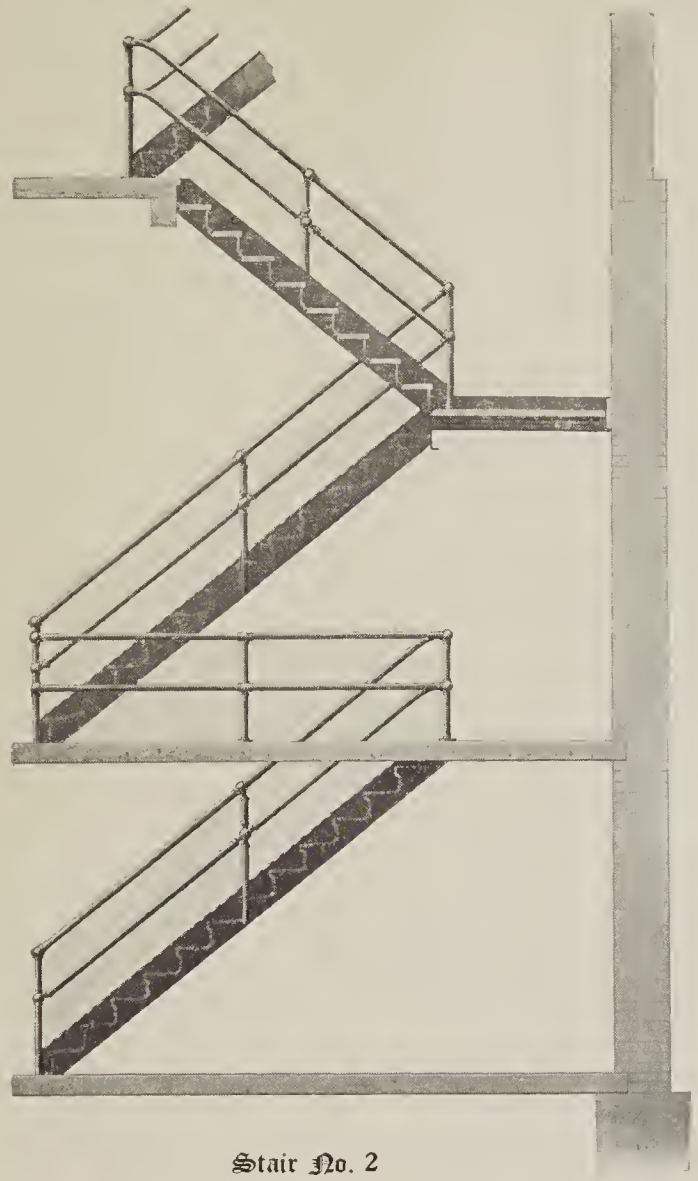
The cost of temporary stairs in building is eliminated if order is sent in time, as our stair may be used as a temporary stair until the building is completed.



Section through Stringer treads and risers. Showing filling.

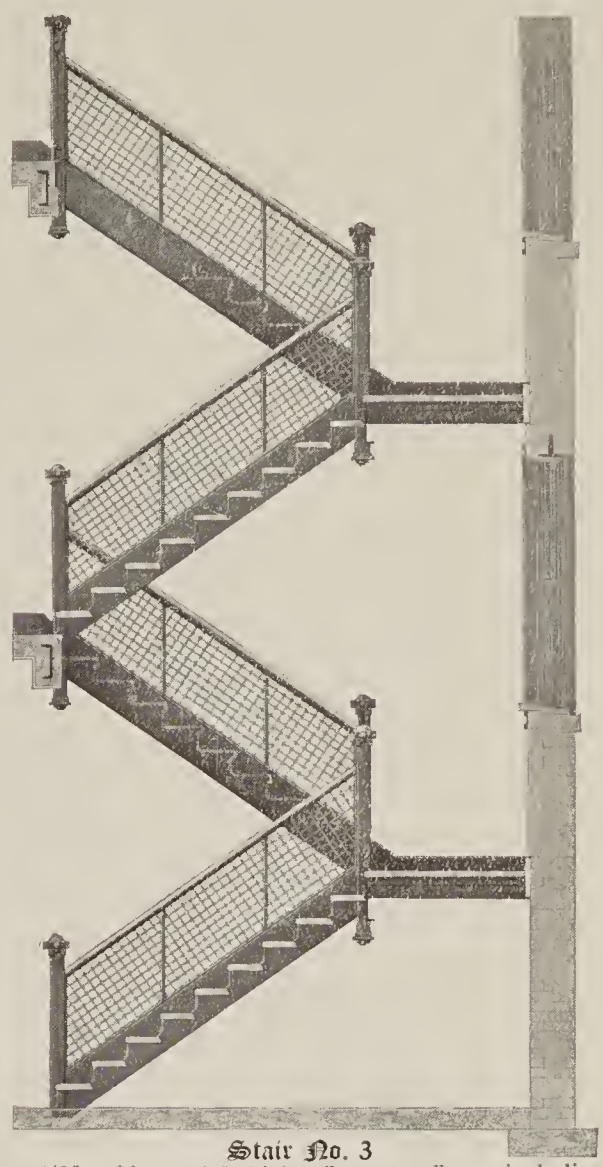


Large section through treads and risers



Stair No. 2

4′0″ wide, 11′0″ high, floor to floor, including intermediate platform, approximate price, $175.00, F. O. B. Cars, St. Louis.



Stair No. 3

4′0″ wide, 11′0″ high, floor to floor, including intermediate platform. Approximate price, $190.00, F. O. B. Cars, St. Louis.

Typical Steel and Concrete Stairs, for Schools and Factories. No projections to catch clothing of women and children and less costly than baluster railing.

Patent No. 964222, July 12, 1910. Other patents pending.

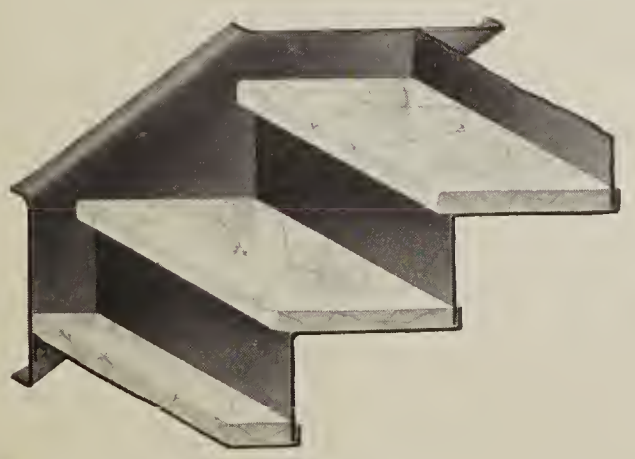
Specifications:—Stringer shall be of 3/16″ steel plate of the width shown on plans and to be bent in channel form as detailed. Treads and risers shall be made of one continuous piece of plate steel No. 12 gauge, bent to form as indicated and shall have a sanitary "V" at the intersection of tread filling and riser. The treads to be supported at the ends by ½x½″x1½″ special clamps securely bolted to the stringers.

The platforms or landings, where required, shall be of No. 12 plate steel with nosings same as treads and supported on a 2x2x3/16″ angle frame riveted or bolted to stringer. The landings and platforms shall be reinforced with tees not over 2′0″ on centers.

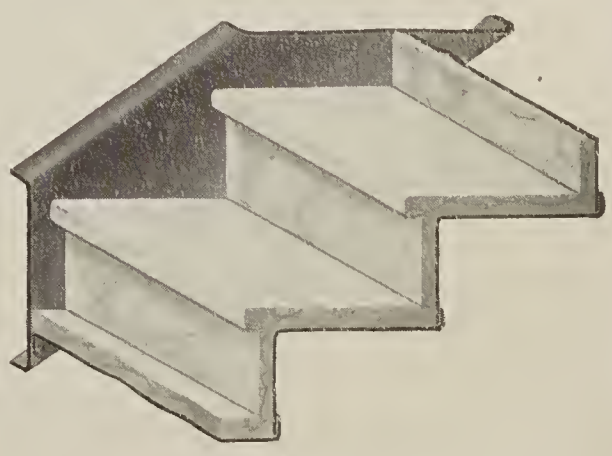
The filling of treads and platforms with concrete or other plastic material shall be done by others.

The newels shall be of No. 12 gauge blue annealed steel with cast caps and pendants with the newels **welded** at corners, making a continouous one piece seamless newel. The caps and pendants shall be **welded** to the newels. Railings to be of the design as indicated on drawings.

The stairs shall be **painted** one coat of paint at factory excepting that part arranged for **tread filling**, which should be left unpainted to insure greater adhesion of the filler material to the steel.



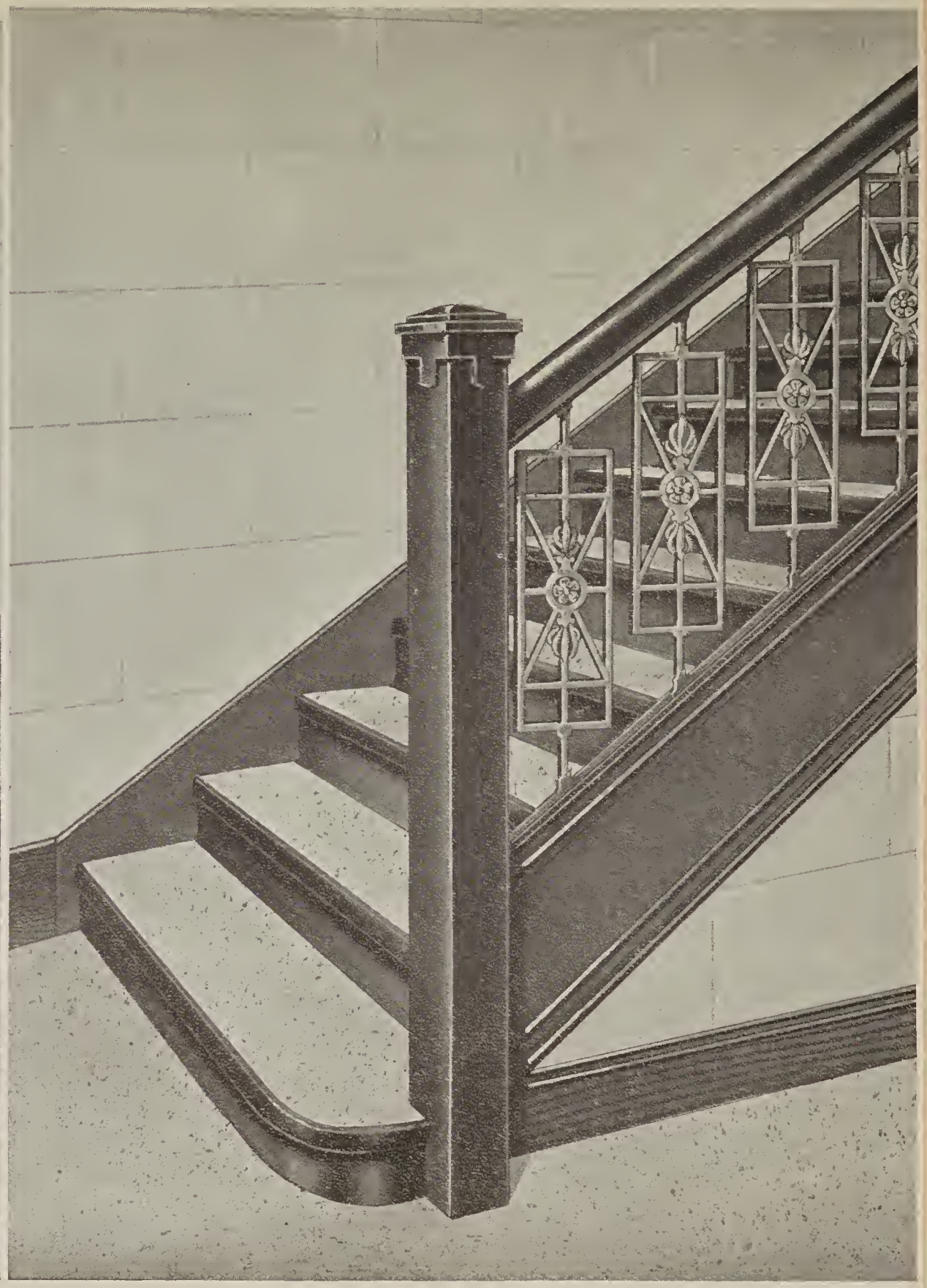
Section showing Marble treads, steel risers and steel subtreads



Section showing Marble treads and risers, steel subtreads and risers

Stair No. 4. 4′0″ wide, 11′0″ high, floor to floor, including intermediate platforms, approximate price, $240.00. F. O. B. Cars, St. Louis. (Cast rail.) **Patent No. 964222, July 12, 1910. Other patents pending.**

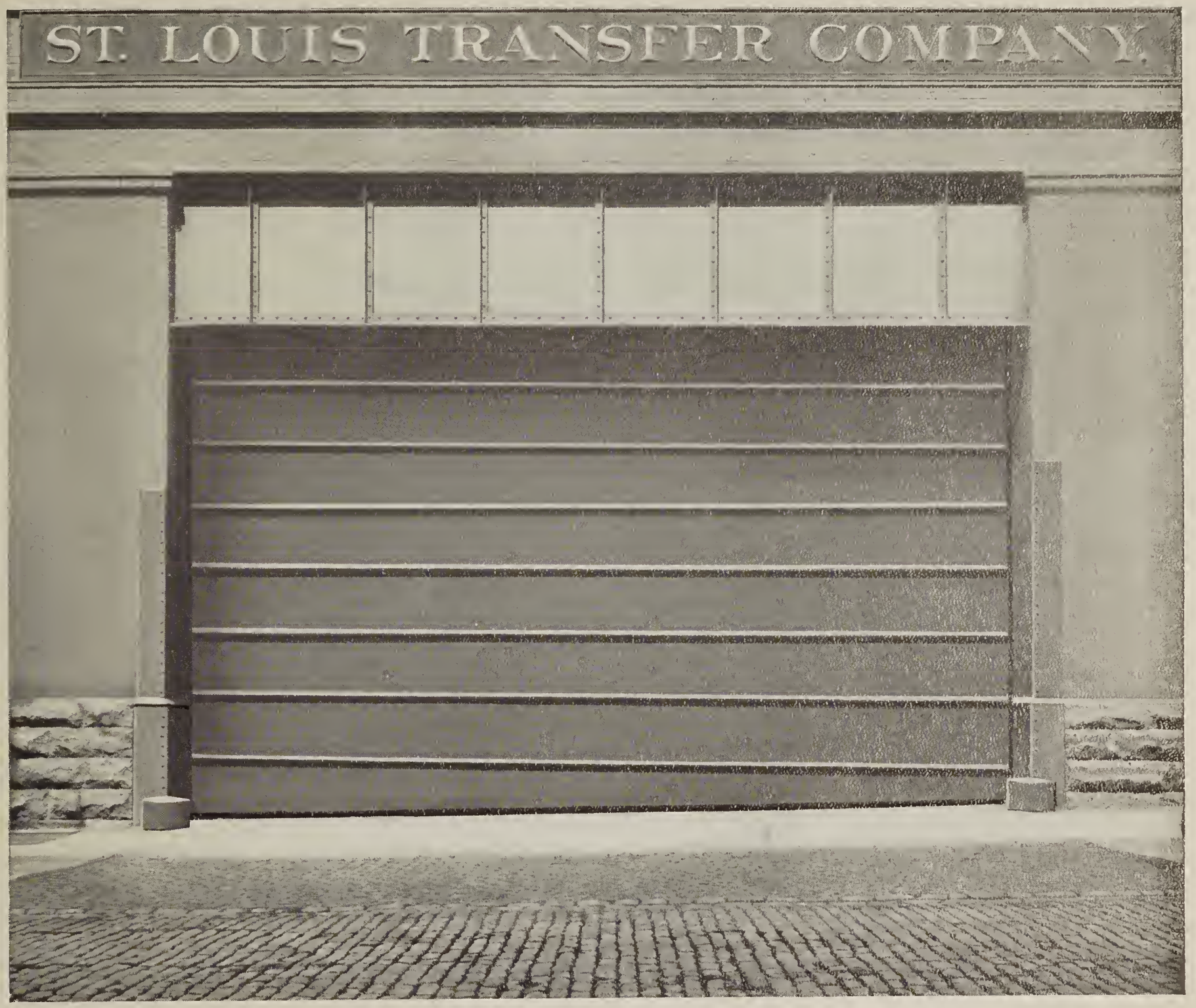
Stair No. 5. 4′0″ wide, 11′0″ high, floor to floor, including intermediate platform and binders at top, approximate price, $190.00, F. O. B., Cars, St. Louis.



Stairs No. 6. 4′0″ wide, 11′0″ high, floor to floor, approximate price, $170.00, F. O. B., Cars, St. Louis. (Cast rail.)

Patent No. 964222, July 12, 1910. Other patents pending.

Stair No. 7. 6'0" and 4'0" wide, 11'0" high, floor to floor, including intermediate platform, approximate price, $260.00, F. O. B. Cars, St. Louis. (Cast rail.)
Patent No. 964222, July 12, 1910. Other patents pending.



The Mesker Patent Plate Steel Sectional Doors and Shutters

The above illustration is from a photograph of the St. Louis Transfer Company's building, showing a Mesker Plate Steel Sectional Door covering two main driveway openings, each thirty feet wide by sixteen feet high, demonstrating their peculiar fitness for large driveway and railroad track openings. **These doors have been in constant daily use for over twelve years,** with no sign of deterioration, either from wear or from the elements.

St. Louis Transfer Company

General Offices, 400 South Broadway

St. Louis, Mo., May 17th, 1913.

Mr. Frank Mesker, V. P.
Mesker Bros. Iron Co., St. Louis, Mo.

Dear Sir:—In reply to your inquiry of the 16*th, beg to say it will be entirely satisfactory for you to use the plate steel sectional doors installed by your Company in the Warehouse of this Company, at Broadway, Fourth, Spruce and Valentine Streets, when soliciting other work of this character, and in this connection it gives me pleasure to say that these doors have given very great satisfaction since the date of their installation.*

Very truly yours,

G. J. TANSEY, President.

The Mesker Patent Plate Steel Sectional Doors and Shutters have been recently tested at the Underwriters' Laboratories, Inc., Chicago, Illinois, with results that exceeded our highest expectations. Their high value as a fire retardant has been established and we have made application for the Underwriters' label service.

The adaptibility of these Doors and Shutters extends to all classes of buildings and to openings, of any dimensions. We specialize on large doors, for exterior or interior openings, where the minimum space required for jambs is desired.

The general description given on pages 18 and 19 will be of assistance to architects and engineers in preparing their specifications. We are prepared to furnish special designs to suit any possible conditions of construction, involving the application of doors for unusually large openings.

The Mesker Patent Plate Steel Sectional Doors and Shutters

The above illustration is from a photograph of the St. Louis Transfer Company's building (Spruce Street side), showing installation of the Plate Steel Sectional Doors.

Construction:—The sections are made in one piece of No. 22 to No. 16 steel plates either black or galvanized. The edges are reinforced and formed to interlock when the door is closed. The interlocking of the edges makes our doors the most rigid, gives them the greatest fire resistance and makes them more weather and storm proof than any other door manufactured. The ends of the section project into grooves in the jambs, 1½″ on each side of opening. This serves to prevent the ends from becoming dislodged and not only increases the fire resistance, but also acts as a wind brake to keep out the elements. Each section is equipped with counterbalance weights attached to sash chains or cables running over pulleys in the top of jambs. This method of construction makes each section act independently of the others, so as to enable the door to be readily and easily opened or closed, requiring only force enough to overcome the friction of the moving parts. The door can be partly opened or opened to its full height as the condition requires. The jambs are formed of steel plates from ⅛″ to 3/16″ thick and are in one piece. The grooves in the jambs are 1⅝″ deep for the reception of the ends of the sections which project 1½″ into the grooves as described above. The top edge of the upper section interlocks with a stationary section built into the wall, closing the opening at the top. The jambs are secured by bolts running through the entire thickness of the wall. All of the pulleys, weights and chains or cables are inclosed in the jambs insuring protection from the weather. Each door is equipped with a fusible link, causing the door to close automatically for its entire height in case of fire.

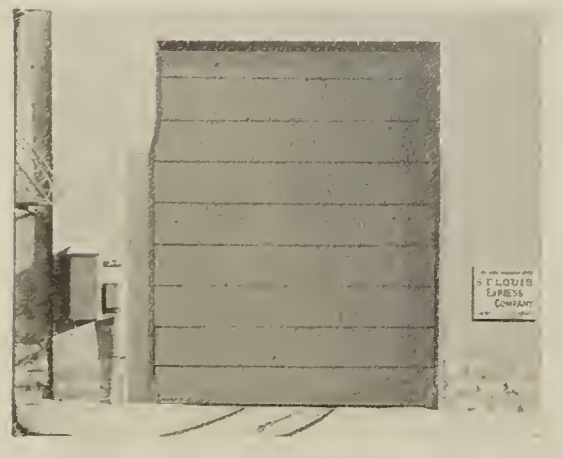
The doors are simple in operation, having no complicated parts, are easily installed, practically indestructible and make a fine appearance.

Sizes:

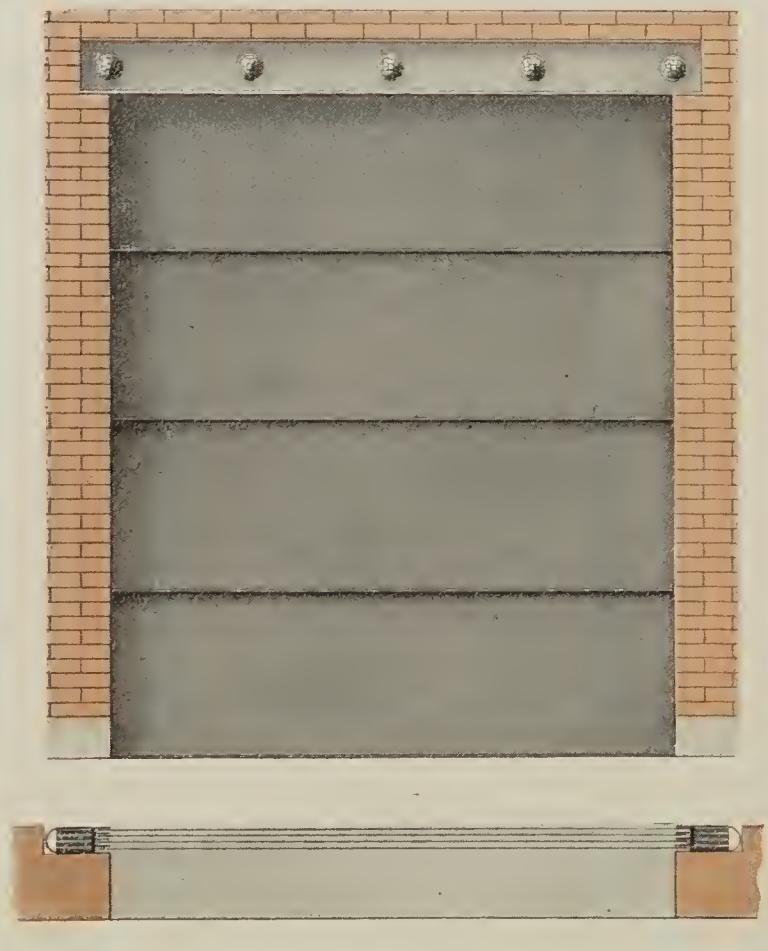
They may be made all dimensions, but the use of the **standard sizes,** as listed below, will insure more prompt deliveries and lower prices. Prices upon application.

3′8″x6′0″
3′8″x8′0″
3′8″x10′0″
4′8″x6′0″
4′8″x8′0″
4′8″x10′0″
5′8″x6′0″
5′8″x8′0″
5′8″x10′0″
6′8″x6′0″
6′8″x8′0″
6′8″x10′0″
7′8″x6′0″
7′8″x8′0″
7′8″x10′0″
8′8″x6′0″
8′8″x8′0″
8′8″x10′0″
9′8″x6′0″
9′8″x8′0″
9′8″x10′0″
10′8″x6′0″
10′8″x8′0″
10′8″x10′0″

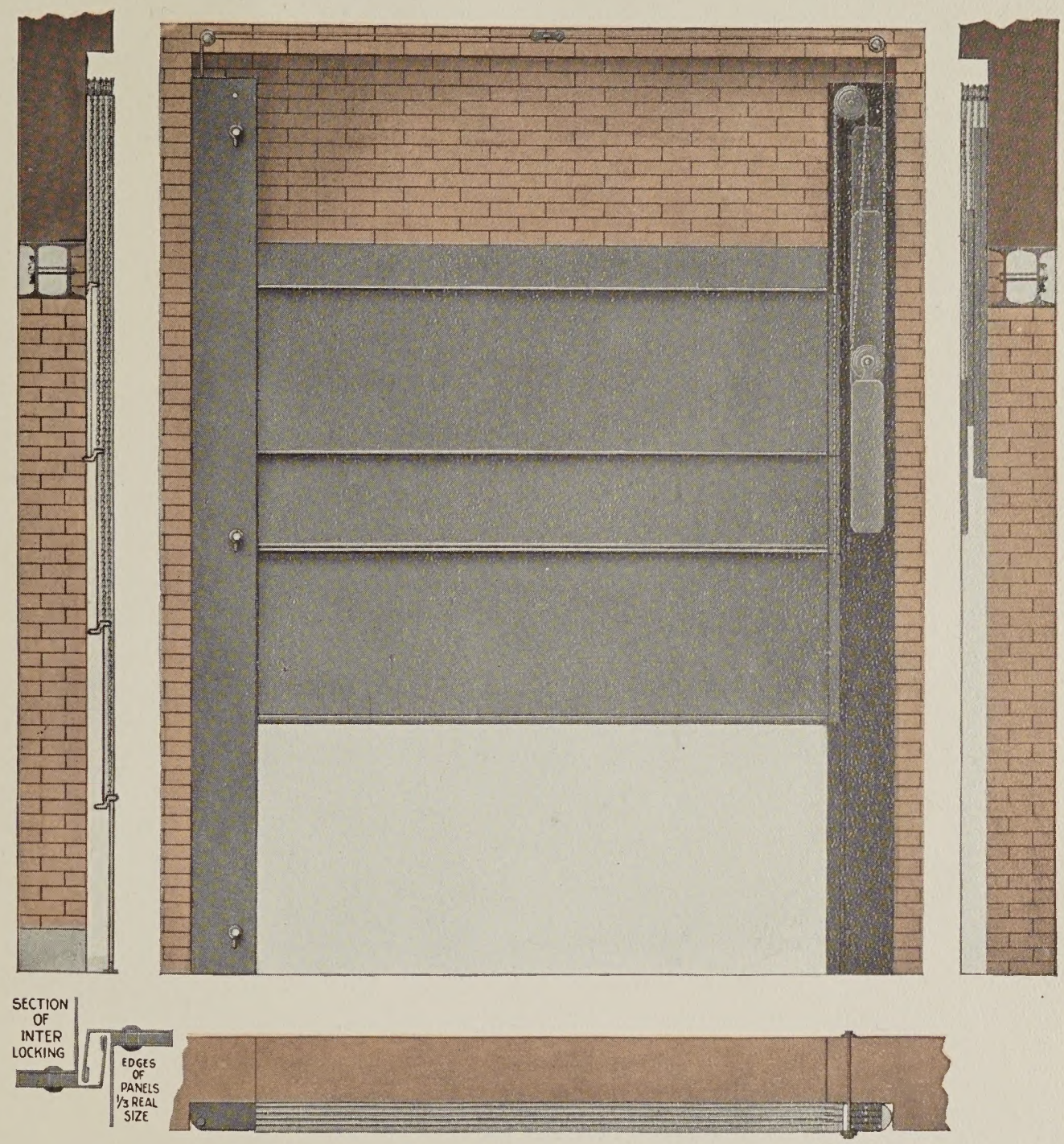
See page 19 for Specifications



Door 15 ft. wide, 18 ft. high
St. Louis Express Co.



St. Louis Transfer Co.



The Mesker Patent Plate Steel Sectional Doors and Shutters

Specifications

Jambs:—The jambs are made of 1/8″ to 3/16″ thick steel plate—formed into a "U" shape 8½″ deep and from 2⅛″ to 4¼″ wide. For new walls, the jambs are recessed; for old buildings, the jambs are on the face of the wall.

Guides:—The guides are made of ½″x⅜″ and ⅜″x⅜″ steel bar separators riveted to 2″x⅛″ thick bars, forming guides.

Pulleys:—The pulleys are made of Gray iron casting, 4½″ diameter, set ½″ below top of jambs. The shafts for pulleys are ½″ steel, passing through jambs securely fastened at end.

Counterbalancing Weights:—The counterbalancing weights are made of steel bars of such size and length as the weight of the section will require. The weights are hung in jambs at the space immediately back of the guides.

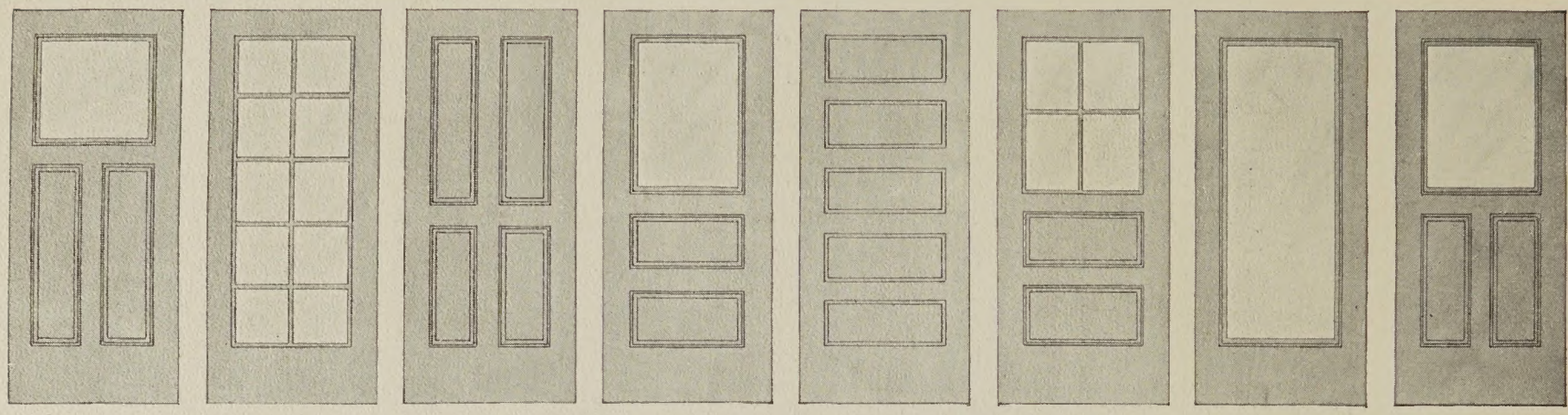
Sections:—The sections are made of steel plate from No. 22 to No. 16 gauge, either black or galvanized. The top and bottom sides of each section have interlocking edges, making the doors both fire and weather proof when closed. The interlocking edges are reinforced with ½″x⅛″ flat bars. The ends of sections will extend 1½″ into the jambs are protected with wearing strips.

Chains:—The sash chains are of metal or wire cable securely attached to the ends of each section and run up on the inside of the grooves over pulleys and attached to the counter-balance weights.

Locking:—Gravity lock at end of the bottom section causes the door to lock automatically when closed.

Automatic Closing and Locking:—For labeled doors. A fusible link is attached, usually near the ceiling, connected with the sash chains or wire cable to weights supporting the bottom section. In case of fire, the melting of the fusible link releases the weights from the bottom section, causing the door to close automatically and at the same time locking it by the gravity lock.

Expansion:—Full provision is made for expansion in case of fire. The vertical expansion in the jambs where the wall bolts pass through is provided for by slotted holes. The bolts are equipped with special fusible washers. The horizontal expansion is taken up by a fusible attachment placed immediately back of the guides, permitting the guides to recede into the jambs in case of fire.



No. 1 No. 2 No. 3 No. 4 No. 5 No. 6 No. 7 No. 8

Metal Covered, Wood Core Doors, With or Without Jambs and Trim

The illustrations show our metal covered doors having wood cores and covered with plain steel, galvanized steel or copper. They are furnished with either metal covered frames or plate steel door jambs as deseribed on page 9. These doors are a high grade character of work and are used for first class office buildings, hotels, etc.

They are neatly paneled and moulded and of any thickness.

In figure 4, design No. 9, we show our metal clad doors and frames while in figure 6, design No. 10, we show the doors with plate steel frames, for any thickness of walls or partitions.

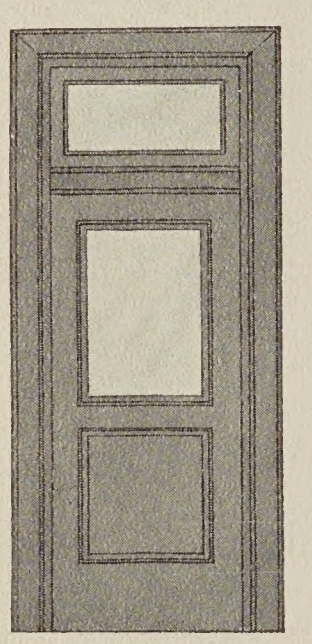


Fig. 4. Design No. 9
Elevation view of door with metal clad frame.

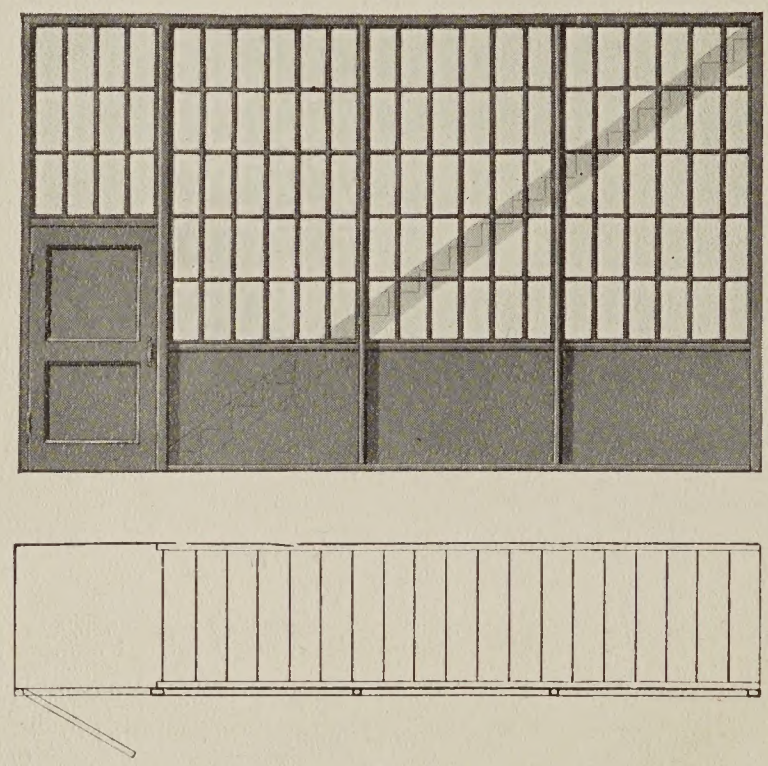


Fig. 5

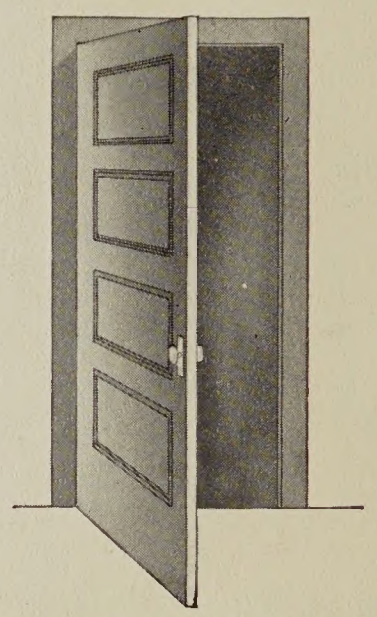


Fig. 6. Design No. 10.
View of plate steel jambs with metal covered or wood doors.

The Mesker Fireproof Stairway Enclosures

To meet the growing demand for a fireproof stairway enclosure, we have introduced the enclosure shown in figure No. 5. It is made entirely of steel with upper panels arranged for the reception of ¼″ rough, ribbed, maze or polished wire glass, while the lower portion is of No. 12 or 14 plate steel reinforced where necessary.

The upper panels are of the same general construction as our solid section steel sash shown on pages 5, 6 and 7. Doors may be of plate steel or metal covered wood eore construction and are equipped when required, with hardware arranged to close automatically at the approach of fire. The enclosures are made any width or height and present a very attractive appearanee.

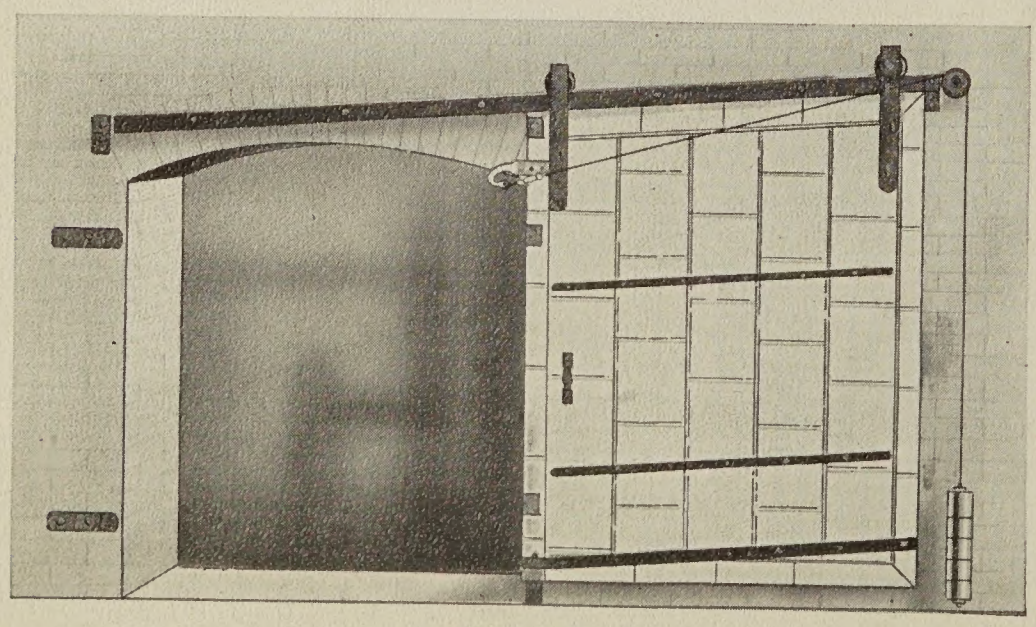


Fig. 8. Tin Clad Fire Door.
Constructed to meet all requirements of underwriters and bearing their labels.

Architeets and Engineers are now speeifying them for buildings where it is desired to reduce the fire hazard to a minimum. Prices upon application. Give dimensions.

Fire Doors and Hardware

We manufacture standard Underwriters' fire doors for warehouses, stores, factories, etc. They are made of two or three thicknesses of wood, tin clad in accordance with the Underwriters' specifications and hardware is arranged to permit the doors to close automatically in ease of fire.

We also manufacture hinged and vertically sliding doors with hardware arranged for automatie elosing.

All our fire doors and hardware are made under the direetion of the Underwriters' Laboratories, Inc., Chicago, Ills., and bear their inspeetion label. These labels are a guarantee that the work has been subjeet to the most rigid inspection.

Write for illustrations and quotations giving schedule of sizes and thickness of walls, describing the location in the building, so that we may quote on the proper thiekness of doors.

AVERY LIBRARY

A List of a Few of the Installations of the Mesker Products

Steel Stairs

Schools

L. D. S. Academy — Thatcher, Ark.
High School Auditorium — Little Rock, Ark.
Taft School — Taft, Cal.
Connaught School — Regina, Canada
Grade School — Ouray, Colo.
Grade School — Jacksonville, Ills.
High School — Hamilton, Ills.
High School — Chenoa, Ills.
Girls' Dormitory — Monmouth, Ills.
High School — Lockport, Ills.
High School — Monticello, Ills.
High School — Mt. Pulaski, Ills.
Grammar School — Rockford, Ills.
High School — Elkhart, Ind.
High School — Montmorenci, Ind.
High School — Anamosa, Iowa
High School — Brooklyn, Iowa
Washington High School — Cedar Rapids, Iowa
High School — New Sharon, Iowa
Mt. Saint Clare Convent — Clinton, Iowa
Manual Training School — Arkansas City, Kansas
High School — Emporia, Kansas
High School — Ft. Scott, Kansas
Lincoln School — Ottawa, Kansas
High School — Wichita, Kansas
Grade School — Beloit, Kansas
Monastery — St. Paul, Kansas
High School — Ruston, La.
Carleton College — Northfield, Minn.
High School — Bultler, Mo.
Veterinary College — Kansas City, Mo.
High School — Webb City, Mo.
High School — O'Neill, Nebr.
Creighton University — Omaha, Nebr.
High School — Deming, N. M.
High School — Utica, N. Y.
Grade School — Youngstown, Ohio
Grade Schools — Erie, Pa.
Wayne School — Erie, Pa.
Sacred Heart School — Erie, Pa.
Boys' Industrial School — Kis Lyn, Pa.
Parochial School — Titusville, Pa.
Anderson School — Dennison, Texas
DeQueen School — Port Arthur, Texas
Grade School — Mellen, Wis.

Public Buildings

St. Vincent Infirmary — Little Rock, Ark.
County Poor Farm — Los Angeles, Cal.
Tifton County Court House — Tifton, Ga.
Y. M. C. A. — Rock Island, Ills.
St. Joseph's Infirmary — Aurora, Ills.
Peru Hospital — Peru, Ills.
Menard County Alms House — Petersburg, Ills.
Mason County Alms House — Teheran, Ills.
Feeble Minded Institute — Glenwood, Iowa
Hospital Soldiers' Home — Davenport, Iowa
State Hospital — Independence, Iowa
City Hall — Oskaloosa, Iowa
Auditorium — Wichita, Kansas
Nichols Hospital — Battle Creek, Mich.
Michigan Reformatory — Ionia, Mich.
Mercer Cou Court House — Princeton, Mo.
Y. M. C. A. — St. Joseph, Mo.
Y. W. C. A. — Kansas City, Mo.
Chase County Court House — Imperial, Nebr.
State Insane Asylum — E. Las Vegas, N. M.
Buffalo Tuberculosis Hospital — Perrysburg, N. Y.
Dormitory, St. Elizabeth's Hospital — Dayton, Ohio
Female Hospital — Somerset, Pa.
Fish Hatchery — Erie, Pa.
Hospital for Insane — Retreat, Pa.
Jones County Court House — Anson, Texas
Sherman Hospital — Sherman, Texas

Office Buildings

Office Building — Brandon, Man., Can.
First National Bank — Quitman, Ga.
First National Bank — Beardstown, Ills.
Woodruff Building — Joliet, Ills.
Savings Bank and Trust Building — Moline, Ills.
Office Building — Port Antonio, Jamaica
Smith County State Bank — Smith Center, Kans.
Oscar Keeline Building — Omaha, Nebr.
First National Bank Building — Alexandria Bay, N. Y.
Cincinnati Trust Building — Cincinnati, Ohio
Commercial Building — Harrisburg, Pa.
First National Bank — Carmichael, Pa.
First National Bank — Long View, Texas
Beatty Building — Houston, Texas
Miller Building — North Yakima, Wash.
U. S. National Bank Building — Vancouver, Wash.

Factory and Business Buildings

Lake Superior Power Co. — Sault Ste. Marie, Ont., Can.
S. Z. Field Bldg. — New Haven, Conn.
United Fruit Co — Port Limon, C. R.
Florida Publishing Co — Jacksonville, Fla.
Elevator — Hammond, Ind.
Dubuque Packing Co. — Dubuque, Iowa
Dameron-Pierson Bldg. — New Orleans, La.
Westfelt Building — New Orleans, La.
Anheuser-Busch Brewing Assn. — St. Louis, Mo.
Simmons Hardware Co. — St. Louis, Mo.
"Bee" Annex — Omaha, Nebr.
Hornell Ice and C. S. Bldg. — Hornell, N. Y.
Glenn Building — Cincinnati, Ohio
Ohmer Fare Register Bldg. — Dayton, Ohio
Dayton Biscuit Co — Dayton, Ohio
Benbow-Horton Bldg. — Lawton, Okla.
Scranton Electric Co. — Scranton, Pa.
Sears-Roebuck Bldg. — Dallas, Texas
Houston Ice and Brewing Co. — Houston, Texas

Lodge Buildings

Masonic Hall — Hilo, Hawaii
Elks' Building — Rockport, Ills.
Scottish Rite Cathedral — E. St. Louis, Ills.
Knights of Pythias Building — Berne, Ind.
Knights of Columbus Building — Mason City, Iowa
Westport Masonic Temple — Kansas City, Mo.
Odd Fellows' Home — Liberty, Mo.
Masonic Building — Auburn, N. Y.
Elks' Building — Zanesville, Ohio

Residences

Shields' Residence — Kansas City, Mo.
Will H. Zorn — West Plains, Mo.
Meek Residence — Burks Garden, Va.

Theatres

Hippodrome — Alton, Ills.
Talbot's Hippodrome — St. Louis, Mo.
Bijou — St. Louis, Mo.

Telephone Buildings

Central Union Telephone Building — Galesburg, Ills.
Telephone Building — Kankakee, Ills.
Telephone Building — Rockford, Ills.
Telephone Building — Terre Haute, Ind.
Telephone Building — Ft. Dodge, Iowa
Home Telephone Building — St. Joseph, Mo.
Telephone Building — Watertown, S. D.

Garages

C. W. Williams — Bloomington, Ills.
Morris Garage — New Orleans, La.

Apartment Houses

Elmo Apartments — St. Louis, Mo.
Hoffman Apartments — St. Louis, Mo.

Department Stores

Robinson-MacBean — Moose Jaw, Sask., Can.
Schaper Bros. — St. Louis, Mo.
Graham-Sykes Bldg. — Muskogee, Okla.
Henry Leh Building — Allentown, Pa.

Hotels

Pine Bluff Hotel — Pine Bluff, Ark.
Goldman Hotel — Ft. Smith Ark.
Seelbach Hotel — Louisville, Ky.
Youree Hotel — Shreveport, La.
Mehrtens Hotel — Grand Rapids, Mich.
Hotel Golden — O'Neill, Nebr.
Green Hotel — Dayton, Ohio
Lee Huckins Hotel — Oklahoma City, Okla.
Citizens Hotel — Nowata, Okla.

Hollow Metal, Wire Glass, Windows

Salt River Valley Water Users' Assn.
Power Houses — Phoenix, Ariz.
Korriek's New York Store — Phoenix, Ariz.
P. Burns & Co., Packing House — Calgary, Can.
Hernando County Court House — Brookville, Fla.
Sumter County Court House — Bushnell, Fla.
Tampa Electric Co — Tampa, Fla.
Home Security Bldg. — Tampa, Fla.
Watkins Building — Orlando, Fla.
Tift County Court House — Tifton, Ga.
Redmen's Wigwam — Atlanta, Ga.
J. P. Stephens Engraving Co.'s Bldg. — Atlanta, Ga.
Potts Building — Atlanta, Ga.
Bowie Building — Atlanta, Ga.
The Wahlfeld Mfg. Co. — Peoria, Ills.
Westall & Barnes Bldg. — Sumner, Ills.
Jenkinson-Haxby Bakery — Jacksonville, Ills.
Fair Department Store — Kankakee, Ills.
Central Union Telephone Building — Kankakee, Ills.
Richardson Building — Kankakee Ills.
Fischer Theatre Bldg. — Danville, Ills.
Danville Aubrun Auto Co.'s. Garage — Danville, Ills.
Stone Bros. Department Store — Griggsville, Ills.
New State Bank — Waterloo, Ills.
Rock Island Sash and Door Co. — Rock Island, Ills.
Pearson Store Building — Mt. Vernon, Ind.
Power House — Tell City, Ind.
Muncie Electric Light Co's. Power House — Muncie, Ind.
Fieber & Holmes Warehouse — Brookville, Ind.
Anthony Hotel — Ft. Wayne, Ind.
J. P. Talcott Estate Garage — Williams, Iowa
M. L. Quinlan Building — Ft. Dodge, Iowa
Alstadt & Langlas Bakery — Waterloo, Iowa
Van Allen Building — Clinton, Iowa
Casino Theatre — Davenport, Iowa
Columbia Theatre — Davenport, Iowa
Krause Building — Davenport, Iowa
Kansas Gas & Elec. Co. Tool House — Wichita, Kansas
Wichita Produce House — Wichita, Kansas
Rumely Building — Wichita, Kansas
Aetna Milling Co. — Wellington, Kansas
Otto Weiss Alfalfa & Stock Food Co. — Wichita, Kansas
Geo. W. Helme Co's. Warehouse — Hopkinsville, Ky.
Imperial Tobacco Co's. Warehouse — Hopkinsville, Ky.
Old Crow Distillery — Frankfort, Ky.
Lexington Laundry Co. — Lexington, Ky.
Spears & Sons Mill & Warehouse — Paris, Ky.
Masonic Lodge Building — Haynesville, La.
Sales Barn — Shreveport, La.
Wesleyan Buildings — Boston, Mass.
Houghton County Sanitarium — Hancock, Mich.
The Vendome Hotel, Annex No. 2 — Minneapolis, Minn.
The Andrus Office Building — Minneapolis, Minn
Kemper County Court House — DeKalb, Miss.
Peter Pehl Buildings — Sedalia, Mo.
The Hannibal National Bank — Hannibal, Mo.
Anheuser-Busch Brewing Assn. Bldg. — Sedalia, Mo.
Western Newspaper Union — St. Louis, Mo.
The Geo. P. Plant Milling Co. — St. Louis, Mo.
Ullman Bros. Garage — Springfield, Mo.
Harry Cooper Supply Co.-Warehouse — Springfield, Mo.
Barry County Court House — Cassville, Mo.
Bozeman Milling Co. — Bozeman, Mont.
Lewis & Clark County Court House — Helena, Mont.
State School for Feeble Minded — Kinston, N. C.
E. Carolina Teachers Training School, Greenville, N. C.
Sol Bear Winery — Wilmington, N. C.
Wayne County Court House — Goldsboro, N. C.
Bodden Store & Office Building — Goldsboro, N. C.
Hornell Ice & Cold Storage Co. — Hornell, N. Y.
Central Hudson Gas & Electric Co.
Garage — Poughkeepsie, N. Y.
Cincinnati Mfg. Co. — Cincinnati, Ohio
Western Electric Co's. Building — Cincinnati, Ohio
F. S. Gottschalk Bldg. — Cincinnati, Ohio
Masonic Temple — Fostoria, Ohio
Superior Foundry Co. — Cleveland, Ohio.
Turner Realty Co's. Building — Toledo, Ohio
B. H. Starry Mercantile Bldg. — Kingfisher, Okla.
Phoenix Building — Muskogee, Okla
Fite-Rowsey Building — Muskogee, Okla.
Elks' Building — Shawnee, Okla.
Harris Building — Wagoner, Okla.
Raymond Office Building — Wagoner, Okla.
The Penwick Distillery — Cheswick, Pa.
Lurio Bros. Store Building — Lancaster, Pa.
West Branch Novelty Co. — Milton, Pa.
T. M. Miller Co's. Building — Scranton, Pa.
Shannon Reynolds Building — Carbondale, Pa.
The Wallace Building — Greenville, S. C.
State Bank — Carthage, S. D.
Dakota State Bank — Madison, S. D.
Madison Auto & Supply Co's. Garage — Madison, S. D.
Chattanooga Warehouse &
Cold Storage Co. — Chattanooga, Tenn.
Montague Mailing Machinery Co., Chattanooga, Tenn.
Wolflin Bros. Garage — Amarillo, Texas
Merzbacher-Deckert Building — Marshall, Texas
Graham Building — Greenville, Texas
Brenham Compress Oil & Mfg. Co. — Brenham, Texas
Quanah Light & Ice Co. — Quanah, Texas
Hotel Carroll — Lynchburg, Va.

Solid Section Steel Sash

St. L. S. W. R. R. Car Shops — Pine Bluff, Ark.
Libby, McNeil & Libby — Sacramento, Cal.
Los Angeles Aqueduct Power House — Saugus, Cal.
Woodcraft Hospital for Insane — Pueblo, Colo.
New Britain Gas Co. — New Britain, Conn.
C. B. Witt, Warehouse — Tampa, Fla.
Centro Asturiano Club — Tampa, Fla.
Kibbler Hotel — Lakeland, Fla.
Friebele Building — Tampa, Fla.
Electric Light & Power Co. — St. Petersburg, Fla.
Blue Ridge Marble Works — Nelson, Ga.
Oregon Short Line R. R. Co.
Storage House — Pocatello, Idaho
Missouri Malleable Iron Works — E. St. Louis, Ills.
Edward & Chapman Laundry Bldg. — Springfield, Ills.
Southern Boiler Works — Belleville, Ills.
National Enameling & Stamping Co. — Granite City, Ills.
B. & O. R. R. Co., Storage House — Garrett, Ind.
Centennial School — Evansville, Ind.
High School — Fairfield, Iowa
Ft. Dodge Telephone Building — Ft. Dodge, Iowa
Whittall Dye House — Worchester, Mass.
Rosenbaum Bros. Building — Cumberland, Md.
Hubbard Hardware Co. — Flint, Mich.
High School — International Falls, Minn.
Brown Realty Co. Building — Vicksburg, Miss.
Clark & Co. — Vicksburg, Miss.
Sherard Grocery Co. — Vicksburg, Miss.
Plant Milling Co. — St. Louis, Mo.
Tower Building — St. Louis, Mo.
Broderick & Bascom Rope Co. — St. Louis, Mo.
Board of Education, Garage — St. Louis, Mo.
Anheuser Busch Brewing Assn.
Mechanical Shops — St. Louis, Mo.
Anheuser-Busch Brewing Assn.
Power House — St. Louis, Mo.
City Water Works, Garage — St. Louis, Mo.
St. L. S. W. R. R., Freight House — St. Louis, Mo.
Deaf Mute Institute, Industrial Bldg. — Buffalo, N. Y.
Jacob Vossler Co. Bldg. — Cincinnati, Ohio
Luzerne Cut Glass Co. — W. Pittston, Pa.
Archbald Silk Co. — Archbald, Pa.
T. M. Miller Co's. Building — Scranton, Pa.
Brokers Produce Assn. — Philadelphia, Pa.
F. W. Maurer & Sons Co. — Philadelphia, Pa.
Argood Chocolate Co — Philadelphia, Pa.
U. S. Navy Locomotive & Crane Shed, Charleston, S. C.
Binswanger & Co. — Memphis, Tenn.
El Paso Foundry & Machine Co. — El Paso, Texas
Southern Mfg. Co. Bldg. — Richmond, Va.